

**JUDUL MAKALAH : THE EFFECT OF HUMAN CAPITAL AND PHYSICAL CAPITAL ON REGIONAL FINANCIAL CONDITION: THE MODERATING EFFECT OF MANAGEMENT CONTROL SYSTEM**

**Reputasi : Terindeks Scopus – Q1**

<b>No</b>	<b>Item/Subject</b>	<b>Date</b>
1	Confirming submission to Heliyon	07 Maret 2021
2	Send Back to Author: Request to Edit Submission	08 Maret 2021
3	Editorial Manager Registration	09 Maret 2021
4	Elsevier customer survey	12 Maret 2021
5	submission HELIYON-D-21-01738 to Heliyon	13 Maret 2021
6	Confirming submission to Heliyon	16 Maret 2021
7	Decision on submission HELIYON-D-21-01738R1 to Heliyon	25 Maret 2021
8	Confirming submission to Heliyon	02 April 2021
9	Decision on submission HELIYON-D-21-01738R2 to Heliyon	20 April 2021
10	Your revision is due	23 April 2021
11	Decision on submission to Heliyon	23 April 2021
12	Production has begun on your article [HLY_6945] in Heliyon	24 April 2021
13	Publishing Agreement completed for your article [HLY_e06945]	27 April 2021
14	Rights and Access form completed for your article [HLY_e06945]	Tue, Apr 27, 9:20 AM
15	Proofs of [HLY_6945]	Tue, Apr 27, 11:15 PM
16	Corrections received - [HLY_6945]	Wed, Apr 28, 12:13 PM
17	Share your article [HLY_e06945] published in Heliyon	Sun, May 2, 8:10 AM

# 1. Confirming submission to Heliyon

The screenshot shows a Gmail interface with a search bar containing "label:heliyon". The email list on the left includes "Inbox" (14), "Starred", "Snoozed", "Sent", "Drafts", "asriusman@g.unh..." (11), and "Heliyon" (highlighted). Below the list are "Meet" and "Hangouts" sections.

The selected email is titled "Confirming submission to Heliyon" and is from "Heliyon <em@editorialmanager.com>" dated "Mar 7, 2021, 8:39 AM". The email content includes:

- CC: "Hillman Wirawan" [hillmancam07@gmail.com](mailto:hillmancam07@gmail.com); [hillman@unhas.ac.id](mailto:hillman@unhas.ac.id); [hwirawan@deakin.edu.au](mailto:hwirawan@deakin.edu.au), "Hillman Wirawan" [hillmancam07@gmail.com](mailto:hillmancam07@gmail.com); [hillman@unhas.ac.id](mailto:hillman@unhas.ac.id); [hwirawan@deakin.edu.au](mailto:hwirawan@deakin.edu.au), "Hillman Wirawan" [hillmancam07@gmail.com](mailto:hillmancam07@gmail.com); [hillman@unhas.ac.id](mailto:hillman@unhas.ac.id); [hwirawan@deakin.edu.au](mailto:hwirawan@deakin.edu.au)
- \*This is an automated message.\*
- THE EFFECT OF HUMAN CAPITAL AND PHYSICAL CAPITAL ON REGIONAL FINANCIAL CONDITION: THE MODERATING EFFECT OF MANAGEMENT CONTROL SYSTEM
- Dear Dr. Usman,
- We have received the above referenced manuscript you submitted to the Business and Economics section of Heliyon. It has been assigned the manuscript number HELIYON-D-21-01738. To track the status of your manuscript, please log in as an author at <https://www.editorialmanager.com/heliyon/>, and navigate to the "Submissions Being Processed" folder.
- Thank you for submitting your work to Heliyon, an open access journal that is part of the Cell Press family.

This section shows a detailed view of the email's metadata and body content. The metadata includes:

- From: Heliyon <em@editorialmanager.com>
- Reply-to: Heliyon <info@heliyon.com>
- To: Asri Usman <asriusman@unhas.ac.id>
- Date: Mar 7, 2021, 8:39 AM
- Subject: Confirming submission to Heliyon
- Mailed-by: editorialmanager.com
- Signed-by: editorialmanager.com

The body content includes:

- Dear Dr. Usman,
- We have received the above referenced manuscript you submitted to the Business and Economics section of Heliyon. It has been assigned the manuscript number HELIYON-D-21-01738. To track the status of your manuscript, please log in as an author at <https://www.editorialmanager.com/heliyon/>, and navigate to the "Submissions Being Processed" folder.
- Thank you for submitting your work to Heliyon, an open access journal that is part of the Cell Press family.
- Kind regards,  
Heliyon
- More information and support
- You will find information relevant for you as an author on Elsevier's Author Hub: <https://www.elsevier.com/authors>
- FAQ: How can I reset a forgotten password? [https://service.elsevier.com/app/answers/detail/a\\_id/28452/supporthub/publishing/](https://service.elsevier.com/app/answers/detail/a_id/28452/supporthub/publishing/)
- For further assistance, please visit our customer service site: <https://service.elsevier.com/app/home/supporthub/publishing/>
- Here you can search for solutions on a range of topics, find answers to frequently asked questions, and manage via interactive tutorials. You can also talk 24/7 by live chat and email

## 2. Send Back to Author: Request to Edit Submission

The screenshot shows a Gmail interface with a search bar containing 'label:heliyon'. The left sidebar shows folders like 'Compose', 'Inbox', 'Starred', 'Snoozed', 'Sent', 'Drafts', and 'Heliyon'. The main content area displays an email from Heliyon with the subject 'Send Back to Author: Request to Edit Submission'. The email body contains the following text:

Dear Dr. Usman,

Your submission entitled "THE EFFECT OF HUMAN CAPITAL AND PHYSICAL CAPITAL ON REGIONAL FINANCIAL CONDITION: THE MODERATING EFFECT OF MANAGEMENT CONTROL SYSTEM" has been received by Heliyon. However, before we can proceed with the review process we ask you to address the following:

Please register your co-author Zulkifli in Editorial Manager with an appropriate personal or institutional email address.

Please approve your transferred submission. You are welcome to make changes to your manuscript at this point, including responding to any editor or reviewer comments from the previous journal.

Please log onto Editorial Manager as an Author:

<https://www.editorialmanager.com/heliyon/>

1. Go to the menu item "Submissions/Revisions Sent Back to Author".
2. Click "Edit Submission/Revision".
3. Click on the relevant submission step on the left-hand menu.
4. Provide or modify the item/information as appropriate.
5. Go to "Attach Files" and "Build PDF for my Approval".
6. View and Approve your new PDF file including the changed item(s), or if needed, Edit again.

Thank you for submitting your work to the journal, and if you have any questions, please do not hesitate to contact me.

Yours sincerely,

The screenshot shows a detailed view of the email header and body content. The header includes the sender 'Heliyon <em@editorialmanager.com>', the date 'Mar 8, 2021, 6:05 PM', and the subject 'Send Back to Author: Request to Edit Submission'. The body text is identical to the one in the previous screenshot, including the instructions for logging onto Editorial Manager and the list of steps to follow.

### 3. Editorial Manager Registration

The screenshot shows a Gmail interface with a search bar containing "label:heliyon". The left sidebar lists folders: Compose, Inbox (14), Starred, Snoozed, Sent, Drafts, asriusman@g.unh... (11), Heliyon, and More. Below these are sections for Meet (New meeting, My meetings) and Hangouts (Dr. Asri Usman, +). The main content area displays an email titled "Editorial Manager Registration" from Heliyon, dated Mar 7, 2021, 8:30 AM. The email text includes: "Dear Dr. Usman, Thank you for registering for the Editorial Manager online submission and peer review tracking system for Heliyon. Here is your username, which you need to access Editorial Manager at <https://www.editorialmanager.com/heliyon/>. Username: AUzman-396. If you do not know your confidential password, you may reset it by clicking this link: <https://www.editorialmanager.com/heliyon/l.asp?i=1591251&l=GACB007W>. Please save this information in a safe place. You can change your password and other personal information by logging into the Heliyon website and clicking on the Update My Information link on the menu. Best regards, Heliyon. In compliance with data protection regulations, you may request that we remove your personal registration details at any time. (Use the following URL: <https://www.editorialmanager.com/heliyon/login.asp?a=r>). Please contact the publication office if you have any questions.

Below the email is a reply from Dr. Asri Usman, SE., M.Si.Ak., dated Mar 9, 2021, 9:52 AM, to Heliyon. The reply text includes: "Dear Heliyon, Thanks for the reminder, we apparently made an error on the title page. The error has been fixed and the manuscript has been resubmitted. best regards,"

The bottom of the screen shows a system tray with the time 4:25 PM and date 5/11/2021.

mail.google.com/mail/u/4/#label/Heliyon/FMfcgxlsmldJdLZKwXDVcHGQcQGDFr

Gmail label:heliyon

Compose

Inbox 14

Starred

Snoozed

Sent

Drafts

asriusman@g.unh... 11

Heliyon

More

Meet

New meeting

My meetings

Hangouts

Dr. Asri Usman, +

No recent chats  
Start a new one

24 of 27

Re: Editorial Manager Registration [210309-005556]

Heliyon x

Heliyon <info@heliyon.com> to me Mar 9, 2021, 9:52 AM

Hello,

Many thanks for contacting Heliyon!

This is an automated acknowledgement to confirm we have received your query. A member of the team will respond to you within 48 hours.

If you're an author or reviewer who has a question about the Editorial Manager submission and editorial system, please visit the [Editorial Manager Help Portal](#). This site may be able to assist you with your inquiry.

Please avoid changing the subject line of this email when replying to avoid delay with your query.

Best Regards

The Heliyon Team

From: Asri Usman  
Date: 09/03/2021 01:52 AM

Dear Heliyon,  
Thanks for the reminder, we apparently made an error on the title page. The error has been fixed and the manuscript has been resubmitted.

mail.google.com/mail/u/4/#label/Heliyon/FMfcgxlsmldJdLZKwXDVcHGQcQGDFr

Gmail label:heliyon

Compose

Inbox 14

Starred

Snoozed

Sent

Drafts

asriusman@g.unh... 11

Heliyon

More

Meet

New meeting

My meetings

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Dr. Asri Usman, +

No recent chats  
Start a new one

24 of 27

From: Asri Usman  
Date: 09/03/2021 01:52 AM

Dear Heliyon,  
Thanks for the reminder, we apparently made an error on the title page. The error has been fixed and the manuscript has been resubmitted.

best regards,  
Asri Usman

On Sun, Mar 7, 2021 at 8:30 AM Heliyon <em@editorialmanager.com> wrote:

Dear Dr. Usman,

Thank you for registering for the Editorial Manager online submission and peer review tracking system for Heliyon.

Here is your username, which you need to access Editorial Manager at <https://www.editorialmanager.com/heliyon/>.

Username: AUzman-396

If you do not know your confidential password, you may reset it by clicking this link: <https://www.editorialmanager.com/heliyon/l.asp?i=1591251&l=GACB007W>

Please save this information in a safe place.

You can change your password and other personal information by logging into the Heliyon website and clicking on the Update My Information link on the menu.

Best regards,

mail.google.com/mail/u/4/#label/Heliyon/FMfcgxwLsmldLszRRBwvJMpBCGfjPB

Gmail label:heliyon

Compose

Inbox 14

Starred

Snoozed

Sent

Drafts

asriusman@g.unh... 11

Heliyon

More

Meet

New meeting

My meetings

Hangouts

Dr. Asri Usman, +

No recent chats  
Start a new one

Re: Editorial Manager Registration [210309-005556]  
[210309-005556] Heliyon x

Heliyon <info@heliyon.com> Mar 9, 2021, 10:28 AM

to me

How was our service today? 👍👎

Dear Dr. Usman,

Thank you for your email regarding your paper HELIYON-D-21-01738.

From checking, I can confirm that you have successfully submitted your paper to the journal.

Kindly wait for the further update from the Editor.

Kind regards

Shyr Bolivar  
Researcher Support  
ELSEVIER

Make all your research work discoverable, comprehensible, citable and reproducible. Find out more about Elsevier's open access, multidisciplinary [Research Elements journals](#)

From: Administrator  
Date: Tuesday, March 09, 2021 01:52 AM GMT

Hello,

Re: Editorial Manager Registration [210309-005556]  
[210309-005556] Heliyon x

Heliyon <info@heliyon.com> Mar 9, 2021, 10:28 AM

to me

How was our service today? 👍👎

Dear Dr. Usman,

Thank you for your email regarding your paper HELIYON-D-21-01738.

From checking, I can confirm that you have successfully submitted your paper to the journal.

Kindly wait for the further update from the Editor.

Kind regards

Shyr Bolivar  
Researcher Support  
ELSEVIER

Make all your research work discoverable, comprehensible, citable and reproducible. Find out more about Elsevier's open access, multidisciplinary [Research Elements journals](#)

From: Administrator  
Date: Tuesday, March 09, 2021 01:52 AM GMT

Hello,

from: Heliyon <info@heliyon.com>  
reply-to: Heliyon <info@heliyon.com>  
to: asriusman@unhas.ac.id  
date: Mar 9, 2021, 10:28 AM  
subject: Re: Editorial Manager Registration [210309-005556] [210309-005556]  
security: Standard encryption (TLS) [Learn more](#)  
Important according to Google magic:

mail.google.com/mail/u/4/#label/Heliyon/FMfcgxlsmipdLszRRBWvJMpBCGfjPB

Gmail label:heliyon

23 of 27

Make all your research work discoverable, comprehensible, citable and reproducible. Find out more about Elsevier's open access, multidisciplinary [Research Elements journals](#)

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**From:** Administrator  
**Date:** Tuesday, March 09, 2021 01:52 AM GMT

Hello,

Many thanks for contacting Heliyon!

This is an automated acknowledgement to confirm we have received your query. A member of the team will respond to you within 48 hours.

If you're an author or reviewer who has a question about the Editorial Manager submission and editorial system, please visit the [Editorial Manager Help Portal](#). This site may be able to assist you with your inquiry.

Please avoid changing the subject line of this email when replying to avoid delay with your query.

Best Regards

The Heliyon Team

---

**From:** Asri Usman  
**Date:** Tuesday, March 09, 2021 01:52 AM GMT

Dear Heliyon,

Thanks for the reminder, we apparently made an error on the title page. The error has been fixed and the manuscript has been resubmitted.

best regards,  
 Asri Usman

mail.google.com/mail/u/4/#label/Heliyon/FMfcgxlsmipdLszRRBWvJMpBCGfjPB

Gmail label:heliyon

23 of 27

**Date:** Tuesday, March 09, 2021 01:52 AM GMT

Dear Heliyon,

Thanks for the reminder, we apparently made an error on the title page. The error has been fixed and the manuscript has been resubmitted.

best regards,  
 Asri Usman

On Sun, Mar 7, 2021 at 8:30 AM Heliyon <em@editorialmanager.com> wrote:

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If you do not know your confidential password, you may reset it by clicking this link: <https://www.editorialmanager.com/heliyon/1.asp?i=1591251&l=GACB007W>

Please save this information in a safe place.

You can change your password and other personal information by logging into the Heliyon website and clicking on the Update My Information link on the menu.

Best regards,  
 Heliyon

---

In compliance with data protection regulations, you may request that we remove your personal registration details at any time. (Use the following URL: <https://www.editorialmanager.com>

mail.google.com/mail/u/4/#label/Heliyon/FMfcgxlsmIqXsMRRGBXTNrxMnMDwWhQ

label:heliyon

Compose

Inbox 14

Starred

Snoozed

Sent

Drafts

asriusman@g.unh... 11

**Heliyon**

More

Meet

New meeting

My meetings

Hangouts

Dr. Asri Usman, +

No recent chats  
Start a new one

Send Back to Author: Request to Edit Submission

Heliyon x

Heliyon <em@editorialmanager.com> to me Tue, Mar 9, 9:18 PM

Article Title: THE EFFECT OF HUMAN CAPITAL AND PHYSICAL CAPITAL ON REGIONAL FINANCIAL CONDITION: THE MODERATING EFFECT OF MANAGEMENT CONTROL SYSTEM  
Corresponding Author: Dr. Asri Usman

Dear Dr. Usman,

Your submission entitled "THE EFFECT OF HUMAN CAPITAL AND PHYSICAL CAPITAL ON REGIONAL FINANCIAL CONDITION: THE MODERATING EFFECT OF MANAGEMENT CONTROL SYSTEM" has been received by Heliyon. However, before we can proceed with the review process we ask you to address the following:

Please register your co-author Zulkifli in Editorial Manager with an appropriate personal or institutional email address.

Please approve your transferred submission. You are welcome to make changes to your manuscript at this point, including responding to any editor or reviewer comments from the previous journal.

Please log onto Editorial Manager as an Author:

<https://www.editorialmanager.com/heliyon/>

1. Go to the menu item "Submissions/Revisions Sent Back to Author".
2. Click "Edit Submission/Revision".
3. Click on the relevant submission step on the left-hand menu.
4. Provide or modify the item/information as appropriate.
5. Go to "Attach Files" and "Build PDF for my Approval".
6. View and Approve your new PDF file including the changed item(s), or if needed, Edit again.

Thank you for submitting your work to the journal, and if you have any questions, please do not hesitate to contact me.  
Yours sincerely,

u/4/#label/Heliyon/FMfcgxlsmIqXsMRRGBXTNrxMnMDwWhQ

label:heliyon

Send Back to Author: Request to Edit Submission

Heliyon x

Heliyon <em@editorialmanager.com> to me Tue, Mar 9, 9:18 PM

Article Title: THE EFFECT OF HUMAN CAPITAL AND PHYSICAL CAPITAL ON REGIONAL FINANCIAL CONDITION: THE MODERATING EFFECT OF MANAGEMENT CONTROL SYSTEM  
Corresponding Author: Dr. Asri Usman

Dear Dr. Usman,

Your submission entitled "THE EFFECT OF HUMAN CAPITAL AND PHYSICAL CAPITAL ON REGIONAL FINANCIAL CONDITION: THE MODERATING EFFECT OF MANAGEMENT CONTROL SYSTEM" has been received by Heliyon. However, before we can proceed with the review process we ask you to address the following:

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Please approve your transferred submission. You are welcome to make changes to your manuscript at this point, including responding to any editor or reviewer comments from the previous journal.

Please log onto Editorial Manager as an Author:

<https://www.editorialmanager.com/heliyon/>

1. Go to the menu item "Submissions/Revisions Sent Back to Author".
2. Click "Edit Submission/Revision".
3. Click on the relevant submission step on the left-hand menu.
4. Provide or modify the item/information as appropriate.
5. Go to "Attach Files" and "Build PDF for my Approval".
6. View and Approve your new PDF file including the changed item(s), or if needed, Edit again.

Thank you for submitting your work to the journal, and if you have any questions, please do not hesitate to contact me.  
Yours sincerely,

from: Heliyon <em@editorialmanager.com>  
reply-to: Heliyon <info@heliyon.com>  
to: Asri Usman <asriusman@unhas.ac.id>  
date: Mar 9, 2021, 9:18 PM  
subject: Send Back to Author: Request to Edit Submission  
mailed-by: editorialmanager.com  
signed-by: editorialmanager.com

Important according to Google magic.

## 4. Elsevier customer survey

The screenshot shows a Gmail interface with a search bar containing 'label:heliyon'. The email is from 'Elsevier Customer Feedback' (researchteam@surveys.elsevier.com) dated Mar 12, 2021, 6:01 PM. The email content is as follows:

Dear Asri Usman,

We'd love to hear how everything went with Shyr Bolivar from our customer support team when you contacted us on 2021-03-09 00:00:00. The ID of your query was 210309-005556.

We are always striving to provide you with great customer experience. We would really value your feedback on our service so we can make things even better. We have shortened our survey, so it should take no more than 3 minutes to complete. The survey link will remain active for 15 days.

We are sending the survey in the belief that you have received a response to your query. If this is not the case, please check your junk/spam filters to ensure our response didn't get lost.

Your responses will remain confidential. You will not be identified or contacted unless you specifically request to be. To start the survey please click your answer to the question:

**How satisfied are you overall with your most recent experience of Elsevier customer support?**

1  2  3  4  5  6  7

[Extremely Satisfied](#) [Very Satisfied](#) [Satisfied](#) [Neutral](#) [Dissatisfied](#) [Very Dissatisfied](#) [Extremely Dissatisfied](#) [Don't Know](#)

Thank you very much for your time and help.

Kind regards,

Customer & Market Insights Team

Data Protection Notice:

## 5. submission HELIYON-D-21-01738 to Heliyon

mail.google.com/mail/u/4/#label/Heliyon/FMfcgxwLswDnptZPNHrHKzWzPmMIVRJK

Gmail label:heliyon

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### Your submission HELIYON-D-21-01738 to Heliyon

Heliyon x

Heliyon <em@editorialmanager.com> to me Mar 13, 2021, 12:22 AM

Manuscript Number: HELIYON-D-21-01738  
Title: THE EFFECT OF HUMAN CAPITAL AND PHYSICAL CAPITAL ON REGIONAL FINANCIAL CONDITION: THE MODERATING EFFECT OF MANAGEMENT CONTROL SYSTEM  
Journal: Heliyon

Dear Dr. Usman,

Thank you for submitting your manuscript to Heliyon. Before we begin the review process for your manuscript, we perform an initial check against formal criteria. We regret to inform you that there are some critical concerns about your manuscript. Please make changes/corrections as detailed in the comments below.

To submit your updated manuscript, please log in as an author at <https://www.editorialmanager.com/heliyon/> and navigate to the "Submissions Needing Revision" folder under the Author Main Menu. Your revision due date is Apr 11, 2021.

I look forward to receiving your updated manuscript.

Kind regards,  
Pavlos Delias  
Section Editor  
Heliyon

Comments:  
While examining your submission, we observed that it was based on a survey where participants were asked questions relative to issues like personal competences, work experience, etc. Following the journal's ethics policies, your work is classified as "Studies requiring both ethics approval and consent".

Before proceeding with the peer-review of your work we are requesting to submit a copy of the ethics approval from your institution and the consent form that was distributed to participants.

\*\*\*\*\*

Data in Brief (optional):  
We invite you to convert your supplementary data (or a part of it) into an additional journal publication in Data in Brief, a multi-disciplinary open access journal. Data in Brief articles are a fantastic way to describe supplementary data and associated metadata, or full raw datasets deposited in an external repository, which are otherwise unnoticed. A Data in Brief article (which will be reviewed, formatted, indexed, and given a DOI) will make your data easier to find, reproduce, and cite.

You can submit to Data in Brief when you upload your revised manuscript. To do so, complete the template and follow the co-submission instructions found here: [www.elsevier.com/dib-template](http://www.elsevier.com/dib-template). If your manuscript is accepted, your Data in Brief submission will automatically be transferred to Data in Brief for editorial review and publication.

Please note: an open access Article Publication Charge (APC) is payable by the author or research funder to cover the costs associated with publication in Data in Brief and ensure your data article is immediately and permanently free to access by all. For the current APC see: [www.elsevier.com/journals/data-in-brief/2352-3409/open-access-journal](http://www.elsevier.com/journals/data-in-brief/2352-3409/open-access-journal).

Please contact the Data in Brief editorial office at [dib-me@elsevier.com](mailto:dib-me@elsevier.com) or visit the Data in Brief homepage ([www.journals.elsevier.com/data-in-brief/](http://www.journals.elsevier.com/data-in-brief/)) if you have questions or need further information.

More information and support  
FAQ: How do I revise my submission in Editorial Manager [https://service.elsevier.com/app/answers/detail/a\\_id/28463/supporthub/publishing/](https://service.elsevier.com/app/answers/detail/a_id/28463/supporthub/publishing/)

You will find information relevant for you as an author on Elsevier's Author Hub:  
<https://www.elsevier.com/authors>  
FAQ: How can I reset a forgotten password?  
[https://service.elsevier.com/app/answers/detail/a\\_id/28452/supporthub/publishing/](https://service.elsevier.com/app/answers/detail/a_id/28452/supporthub/publishing/)  
For further assistance, please visit our customer service site: <https://service.elsevier.com/app/home/supporthub/publishing/>

In compliance with data protection regulations, you may request that we remove your personal registration details at any time. (Use the following URL: <https://www.editorialmanager.com/heliyon/login.asp?a=r>). Please contact the publication office if you have any questions.

Reply Forward

## 6. Confirming submission to Heliyon

The screenshot shows a Gmail interface with a search bar containing "label:heliyon". The email is titled "Confirming submission to Heliyon" and is from "Heliyon <em@editorialmanager.com>". The email content includes:

\*This is an automated message.\*

Manuscript Number: HELIYON-D-21-01738R1

THE EFFECT OF HUMAN CAPITAL AND PHYSICAL CAPITAL ON REGIONAL FINANCIAL CONDITION: THE MODERATING EFFECT OF MANAGEMENT CONTROL SYSTEM

Dear Dr. Usman,

We have received the above referenced manuscript you submitted to the Business and Economics section of Heliyon. To track the status of your manuscript, please log in as an author at <https://www.editorialmanager.com/heliyon/>, and navigate to the "Revisions Being Processed" folder.

Thank you for submitting your revision to Heliyon, an open access journal that is part of the Cell Press family.

Kind regards,  
Heliyon

More information and support

You will find information relevant for you as an author on Elsevier's Author Hub: <https://www.elsevier.com/authors>

FAQ: How can I reset a forgotten password?  
[https://service.elsevier.com/app/answers/detail/a\\_id/28452/supporthub/publishing/](https://service.elsevier.com/app/answers/detail/a_id/28452/supporthub/publishing/)

For further assistance, please visit our customer service site: <https://service.elsevier.com/app/home/supporthub/publishing/>

Here you can search for solutions on a range of topics, find answers to frequently asked questions, and learn more about Editorial Manager via interactive tutorials. You can also talk 24/7 to our customer support team by phone and 24/7 by live chat and email

In compliance with data protection regulations, you may request that we remove your personal

## 7. Decision on submission HELIYON-D-21-01738R1 to Heliyon

The screenshot shows a Gmail interface with an email from Heliyon. The email subject is "Decision on submission HELIYON-D-21-01738R1 to Heliyon". The sender is Heliyon <em@editorialmanager.com> and the date is Mar 25, 2021, 1:17 AM. The email content includes a thank you for the submission, a summary of reviewer comments, and a request for major revisions. It provides links for author guidelines, revision instructions, and submission details. The email also mentions the COVID-19 pandemic and offers support. The left sidebar shows the Gmail navigation menu with folders like Inbox, Starred, Snoozed, Sent, Drafts, and Hangouts. The right sidebar shows the email's status and actions.

mail.google.com/mail/u/4/#label/Heliyon/FMfcgxwLTgJKFqWsg5dVXrDMSGtsfHJL

label:heliyon

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### Decision on submission HELIYON-D-21-01738R1 to Heliyon

Heliyon <em@editorialmanager.com> Mar 25, 2021, 1:17 AM

Manuscript Number.: HELIYON-D-21-01738R1  
Title: THE EFFECT OF HUMAN CAPITAL AND PHYSICAL CAPITAL ON REGIONAL FINANCIAL CONDITION: THE MODERATING EFFECT OF MANAGEMENT CONTROL SYSTEM  
Journal: Heliyon

Dear Dr. Usman,

Thank you for submitting your manuscript to Heliyon.

We have completed the review of your manuscript and a summary is appended below. The reviewers recommend major revisions are required before publication can be considered.

If you are able to address all reviewer comments in full, I invite you to resubmit your manuscript. We ask that you respond to each reviewer comment by either outlining how the criticism was addressed in the revised manuscript or by providing a rebuttal to the criticism. This should be carried out in a point-by-point fashion as illustrated here: <https://www.cell.com/heliyon/guide-for-authors#Revisions>

To allow the editors and reviewers to easily assess your revised manuscript, we also ask that you upload a version of your manuscript highlighting any revisions made. You may wish to use Microsoft Word's Track Changes tool or, for LaTeX files, the latexdiff Perl script (<https://ctan.org/pkg/latexdiff>).

To submit your revised manuscript, please log in as an author at <https://www.editorialmanager.com/heliyon/>, and navigate to the "Submissions Needing Revision" folder. Your revision due date is May 03, 2021.

We understand that the COVID-19 pandemic may well be causing disruption for you and your colleagues. If that is the case for you and it has an impact on your ability to make revisions to address the concerns that came up in the review process, please reach out to us.

I look forward to receiving your revised manuscript.

Kind regards,  
Pavlos Delias  
Section Editor  
Heliyon

Editor and Reviewer comments:

Reviewer #1: This study has an original idea particularly on understanding the predictor of financial condition in Indonesia. It also brought two important antecedents of a country's financial conditions; human capital and physical capital. However, there are some suggestions that must be addressed before this manuscript is considered for publication. I recommend publication for this manuscript but also suggest some revisions to improve its quality.

Methods:

1. For the method section, if it is possible, please indicate how many potential participants for this study. Also, please discuss whether or not this number had enough power to reduce type II error?
2. Please round the coefficients two digits after point (e.g., .026 becomes .03)
3. The measure section needs some significant revisions. Please include model fit indices (i.e., chi-square, df, p-value, RMSEA), also compared the measurement model with other alternative models to reduce biases. Is this a self-report or expert rating scale? Please give an example of items.
4. In terms of data analysis, please explain why authors prefer HRM technique to Structural Equation Modeling. I understand that HRM is popular among social scientists, but authors should have some reasons regarding its used in this manuscript.

Results:  
Results were in-line with research questions and and hypotheses. However, I have some concerns related to multicollinearity, did authors mean-center the predictors during before performing the HRM? Why/Why not?

Interpretation:  
sounds, the authors were able to draw connection between theories and findings.

Other comments:

## 8. Confirming submission to Heliyon

The screenshot shows a Gmail interface on a desktop browser. The address bar displays the URL: [mail.google.com/mail/u/4/#label/Heliyon/FMfcgxwLtGtgRPDzgWCFrHVjKznzCsNq](mailto:mail.google.com/mail/u/4/#label/Heliyon/FMfcgxwLtGtgRPDzgWCFrHVjKznzCsNq). The search bar contains the text "label:heliyon". The left sidebar shows the "Heliyon" label selected, with 11 messages. The main content area displays an email from Heliyon, dated Friday, April 2, 1:36 PM. The email subject is "Confirming submission to Heliyon". The body of the email contains the following text:

\*This is an automated message.\*

Manuscript Number: HELIYON-D-21-01738R2

THE EFFECT OF HUMAN CAPITAL AND PHYSICAL CAPITAL ON REGIONAL FINANCIAL CONDITION: THE MODERATING EFFECT OF MANAGEMENT CONTROL SYSTEM

Dear Dr. Usman,

We have received the above referenced manuscript you submitted to the Business and Economics section of Heliyon. To track the status of your manuscript, please log in as an author at <https://www.editorialmanager.com/heliyon/>, and navigate to the "Revisions Being Processed" folder.

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Heliyon

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The system tray at the bottom right shows the time as 8:08 AM on 5/21/2021.

## 9. Decision on submission HELIYON-D-21-01738R2 to Heliyon

The screenshot shows a Gmail interface with a search bar containing "label:heliyon". The left sidebar shows the "Heliyon" label selected. The main content area displays an email from Heliyon, dated April 20, 2021, at 11:26 PM. The email subject is "Decision on submission HELIYON-D-21-01738R2 to Heliyon". The sender is Heliyon <em@editorialmanager.com>. The email body contains the following text:

Ms. No.: HELIYON-D-21-01738R2  
Title: THE EFFECT OF HUMAN CAPITAL AND PHYSICAL CAPITAL ON REGIONAL FINANCIAL CONDITION: THE MODERATING EFFECT OF MANAGEMENT CONTROL SYSTEM  
Journal: Heliyon

Dear Dr. Usman,

Thank you for submitting your manuscript to Heliyon.

We have now received all of the editor and reviewer comments on your recent submission to Heliyon. Your paper will become acceptable for publication after implementation of minor formatting and/or administrative changes outlined below. To avoid unnecessary delays in the publication of your manuscript, please do not make any other additional changes during this revision.

To submit your revised manuscript, please log in as an author at <https://www.editorialmanager.com/heliyon/>, and navigate to the "Submissions Needing Revision" folder under the Author Main Menu. When submitting your revised manuscript, please ensure that you upload your most recent document with the "Revised manuscript file - highlighting revisions made" item type.

Kind regards,

Zoe Gooden  
Editorial Assistant  
Heliyon

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Editor and Reviewer comments:

Reviewer #1: Congratulation on completing the revisions, I have seen significant changes in the revised version. I believe this manuscript can proceed to the next publication process.  
Methods, Results, and Discussion section have been properly revised and improved, and they all show

The bottom of the screenshot shows a system tray with the time 8:14 AM on 5/21/2021 and a notification icon.

mail.google.com/mail/u/4/#label/Heliyon/FMfcgxlTzTmmdtpkXvXWqxmEXpXlrR

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Sent

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Editor and Reviewer comments:

Reviewer #1: Congratulation on completing the revisions. I have seen significant changes in the revised version. I believe this manuscript can proceed to the next publication process.  
Methods, Results, and Discussion section have been properly revised and improved, and they all show sufficient information. Therefore, I recommend publication for this manuscript.

Reviewer #2: I am pleased to receive the revised version of this manuscript.  
Methods: this part has been well rewritten with some additional explanations  
Results: this part has been adjusted according to reviewer's suggestion  
Interpretation: this part has been improved and some typos has been corrected

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Please upload a clean copy of your manuscript file, without tracked changes and in a word document format.

Please add a sentence in your Method section including your ethical approval, documenting the full name of the approving ethical committee, and confirming that informed consent was obtained from all participants from your research.

\*\*\*\*\*

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16 of 27

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Reply Forward

8:18 AM  
5/21/2021

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New meeting

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15 of 27

### Your revision is due Heliyon x

Heliyon <em@editorialmanager.com> Apr 23, 2021, 2:37 PM

to me

Ref.: Ms. No. HELIYON-D-21-01738R2  
THE EFFECT OF HUMAN CAPITAL AND PHYSICAL CAPITAL ON REGIONAL FINANCIAL  
CONDITION: THE MODERATING EFFECT OF MANAGEMENT CONTROL SYSTEM  
Heliyon

Dear Dr. Usman,

Thank you for submitting your manuscript "THE EFFECT OF HUMAN CAPITAL AND PHYSICAL  
CAPITAL ON REGIONAL FINANCIAL CONDITION: THE MODERATING EFFECT OF MANAGEMENT  
CONTROL SYSTEM", which has now been sent to you for revision, to Heliyon. This is a reminder to  
complete your revision.

As this revision is now due within 7 days, we wanted to take the opportunity to check on your progress  
with the revision. If you think you will need additional time to complete your revision, please send us a  
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8:33 AM  
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## 11. Decision on submission to Heliyon

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5/21/2021

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Our reference: HLY e06945  
Article reference: HLY\_HELIIYON-D-21-01738  
Article title: The Effect Of Human Capital And Physical Capital On Regional Financial Condition: The Moderating Effect Of Management Control System  
To be published in: Heliyon

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UniversitasHasanuddin

Department of Accounting  
Faculty of Economy and Business  
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Kampus Tamalanrea Makassar  
Makassar, Sulawesi Selatan  
Indonesia  
Phone: not available  
Fax: not available  
E-mail: [asriusman@unhas.ac.id](mailto:asriusman@unhas.ac.id)

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- Left Sidebar:** Compose, Inbox (18), Starred, Snoozed, Sent, Drafts, asriusman@g.unh... (11), **Heliyon**, More, Meet (New meeting, My meetings), Hangouts (Dr. Asri Usman, +), No recent chats (Start a new one).
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  - Body:**
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    - Text: Thank you for completing the Publishing Agreement Form for your article *The Effect Of Human Capital And Physical Capital On Regional Financial Condition: The Moderating Effect Of Management Control System*. Please find attached a copy of the "Journal Publishing (License) Agreement" which you completed online on April 27, 2021.
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Corresponding author	Dr. Asri Usman
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# THE EFFECT OF HUMAN CAPITAL AND PHYSICAL CAPITAL ON REGIONAL FINANCIAL CONDITION: THE MODERATING EFFECT OF MANAGEMENT CONTROL SYSTEM

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## Abstract

This study ~~aims to examine~~ examines the effect of Human Capital and Physical Capital on Regional Financial Condition with a Management Control System as moderator. Participants were employees of the Regional Financial and Asset Management Directorates ~~which were~~ located in three major cities/districts in the province of South Sulawesi, Indonesia. ~~The 75 randomly selected~~ The participants were recruited from three different regions resulting in 75 participants ~~participants to involved~~ in a three-wave data collection procedure. Four measures were developed (i.e. Human Capital, Physical Capital, Management Control System, and Financial Condition) ~~which were found to be~~, which were constructively valid and reliable for research purposes. The results showed that ~~the~~ Human Capital and Physical Capital directly influenced the ~~Financial Conditions~~ Financial Condition. The effect of Human and Physical Capital ~~were~~ was moderated by the Management Control System. Management Control System negatively moderated the effect of Human Capital while at the same time also positively moderated the effect of Physical Capital on Financial Condition. This study collected participant's perceptions towards the study variables without any further investigation to the objective measures. Although, some scholars may find this as the lack of evidence against the actual ~~financial conditions~~ Financial Condition, acknowledging experts' perceptions should provide a better understanding ~~on~~ of the experienced ~~financial condition~~ Condition. Various studies have investigated some factors which may affect ~~the Financial Conditions~~ Financial Condition. However, this study proposed an examination of the role of the Management Control System. In this case, a capital ~~which that is~~ owned by the financial ~~organizations~~ organisations cannot provide a direct impact on the ~~Financial Conditions~~ Financial Condition ~~if there is no~~ without the role of the Management Control System.

**Keywords:** Human Capital, Physical Capital, Management Control System, Financial Condition, and Indonesia

## INTRODUCTION

Financial Condition is determined by the ability of an area to fulfil an obligation for prospering or serving a community. In this regards, there are three core dimensions to evaluate the

~~financial-conditions~~Financial Condition they are environmental, institutional and financial dimensions (Dinapoli, 2011). These three dimensions will be interconnected to produce a ~~suffieient-proper~~ Financial Condition. By fulfilling all these dimensions, ~~the~~ government will be able to bring more stable ~~financial-conditions~~Financial Condition.

Firstly, the environmental dimension is the assessment of ~~Financial-Conditions~~Financial Condition ~~which assessed~~ based on how a government supports or impedes regulations, especially on bringing innovations to the community. Secondly, the institutional dimension is a management practice and legislative policy which guides ~~the fiseal-financial~~ decision making. Its function is often as a response to ~~the~~ environmental or political factors (Dinapoli, 2011). Lastly, ~~the~~ financial dimension is most related to financial performance. This particular dimension includes potential tax or incomes in a particular region and a debt limit and ~~a~~ legality of expenditure from a region. For some countries, it also consists of fiscal ~~decentralization-decentralisation~~ management in which each region will obtain a budget for the funds to be managed.

One of the most important questions to this issue is, what are variables may potentially predict ~~financial-conditions~~Financial Condition. ~~Research in this area has investigated some determinants of Financial Condition and performance. In Indonesia, the type of firm, independent board, gender diversity, and location of director can determine financial distress~~ (Kristanti *et al.*, 2016). ~~On the other hand, a study also revealed that the Capital Adequacy Ratio, Credit Interest Income, and size of the organisation or corporate had a positive effect on financial performance~~ (Elshaday *et al.*, 2018). ~~In some public organisations, the political system played a significant role in financial Condition~~ (Garcia-Sanchez *et al.*, 2012). Some scholars also suggested that ~~cost-efficiency and effective financial management could determine Financial Condition~~ (Cuadrado-Ballesteros and Bisogno, 2019; Zafra-Gómez *et al.*, 2009, 2010). ~~Although some predictors of financial Condition have been revealed, these studies merely focused on the system and management of financial performance. Human resources and other resources have not received much attention, even though organisations demand a certain level of resources to perform effectively.~~

Considering the important roles of resources, the ~~Resource-Resource-Based~~ The ~~Formatted: Indent: First line: 1,27 cm~~ (Barney, 1991) supports the notion that Human Capital and Physical Capital provides significant resources for maintaining ~~suffieient financial-conditions~~Financial Condition. Human capital becomes considerably important because it is a source of innovation and strategy renewal. Human Capital is related to any knowledge, skills, abilities and attitudes owned by personnel in organisations ~~which that~~ are highly supportive for ~~organizational-organisational~~ success (Perrotta, 2018). Further, it can be fostered from ~~an~~ applied research, management objective, reengineering process and improvement or development of workforce skills. Furthermore, ~~H~~human ~~C~~capital creates incremental values to organisations ~~on a daily basis~~daily; via motivation, commitment, competence and effectiveness of ~~the~~ teamwork. However, each ~~organization-organisation~~ offers distinctive approaches ~~in managing human capital and itto managing Human Capital, which~~ also means different values (Lepak and Snell, 2002). Thus, human capital provides unique contributions to ~~Ffinancial condition-Condition~~ based on unique approaches given by ~~the~~ organisations.

In addition to Human Capital, Physical Capital also adds incremental variance to the successful ~~financial conditions~~ Financial Condition. The notion of Physical Capital includes natural resources and other technological devices (Galor and Moav, 2004). The existence of Physical Capital supports the improvement of the Financial Condition of an area. To illustrate, the development of the ~~basic-primary~~ physical conditions such as sanitation, clean water, and electricity in an area will also help ~~to~~ foster the services and welfare for the community, which may later improve ~~Financial Conditions~~ Financial Condition. Physical Capital is also ~~useful-helpful~~ for creating additional values to producing desired input. Thus, it is reasonable to conclude that both human and physical resources act together to influence a region financial condition.

The direct effect of these two capitals (i.e. human and physical) may have been moderated by the level of control performed by organisations. In Indonesia, some empirical investigations conducted by Chandra (2017), ~~and Sari and Fitriani (2009) found that the management control system was able to improve Financial C~~ and Sari and Fitriani (2009) found that the ~~management control system improved~~ onditions Financial Condition. In these two studies, Human Capital and Physical Capital directly impacted financial performance where the organisations had sufficient control over the resources. As a result, the organisations performed better and showed expected ~~financial conditions~~ Financial Condition.

The concept of Control theory in strategic human resource management from Snell (1992) has provided ~~a~~ clear arguments on how high control facilitates ~~the~~ positive effect of human capital and physical capital on desired ~~financial conditions~~ Financial Condition. According to the theory, Human Capital and Physical Capital will leverage financial performance only if an organisation implement ~~a~~ certain degree of control over human capital inputs, behavioural controls, and desired outputs. This further suggests that possessing a management control system favours ~~the effect of Human and Physical Capital~~ Human and Physical Capital's effect on Financial Conditions Financial Condition.

Accordingly, management control system becomes a ~~moderation-moderating variable~~ in creating good Financial Condition for one particular region. In a developing country like Indonesia, the management control system is one of the ~~strongest-most vital~~ foundations of good governance (Purnomo, and Budiawan, 2014). The internal control system includes various management tools that aim to achieve a broad range of objectives. ~~In addition~~ Besides, Riawan (2016) stated that the management control system ~~is able to could~~ improve ~~the Financial Condition of an organisaan~~ an organisation's Financial Condition. Meanwhile, Masyur (2016) postulated that local governments encounter difficulties ~~in implementing a good control system strategy because~~ implementing a good control system strategy because of the absence of synergy between Human Capital and the control strategy. Subsequently, this made the public services became less efficient. Control becomes a crucial element to ensure that financial ~~condition~~ Condition is achieved as expected.

~~Management~~ The management control system consists of management control structures and processes (Halim et al., 2012). The control structure is centered on a variety of responsibility ~~centers~~, while the management control process includes budget preparation, implementation and measurement, ~~as well as~~ reporting, and analysis. In ~~the process of the management control, the decisions are made based on the procedures and other schedules which~~ management control, the

~~decisions are made based on the procedures and other schedules~~ carried out repeatedly year after year. Those procedures usually start from programming. The program is translated into ~~the form of~~ a budget, ~~and~~ then the company operates based on a predetermined budget, procedure and policy. The final results are then compared with the budget, after being evaluated and improved if necessary. Since the procedure is carried out repeatedly every year, then management requires a management control system to improve its performance so that the ~~company's-company's~~ goals can be achieved.

By applying the ~~Resource-Resource-Based theory-Theory~~ and Control theory in Strategic Management, one should ~~be able to~~ capture that the presence of high management control will leverage the effect of human and physical capital on financial ~~condition~~Condition. However, some contextual conditions may also influence this argument. For instance, ~~Indonesia as a developing countries implements a decentralisation policies which as a developing country, Indonesia implements a decentralisation policies that~~ also include financial autonomy for its provinces. Consequently, some experts and practitioners have questioned ~~about~~ some antecedents related to regional financial performance.

Law No. 23 of 2014 states the implementation of regional government directed to accelerate the ~~realization-realisation~~ of community welfare through improving services, empowerment, and community participation, as well as enhancing regional competitiveness by taking ~~it into an account of~~ the principles of democracy, equality, justice, and uniqueness of the area in the system of the Unitary State of the Republic of Indonesia. Regional autonomy is a part of ~~decentralization~~decentralisation. It constructs each region to have the right and obligation for regulating their ~~own~~ area but with the control of the central government and ~~in accordance with following~~ the law. A ~~fiscal decentralization-decentralisation~~ is implemented in order to encourage several levels of government ~~which that are able to can~~ control each region. The local governments ~~in each region~~ will accommodate the aspirations of a community ~~and be obliged to prosper the community in terms of services~~. The success of a regional autonomy is integrated with the ability of a region to manage the funds ~~that have been budgeted to its area~~. ~~In addition~~Also, the local governments should ~~also~~ be able to ~~utilize-utilise~~ the resources that are already owned by the region. Therefore, the success of a regional autonomy significantly is related to the Financial Condition of the region.

Unfortunately, contrasting views emerged regarding ~~the effect of Human Capital and Physicial Capital~~Human Capital and Physicial Capital's effect on ~~Financial Conditions~~Financial Condition in Indonesia. For instance, Nirwana and colleagues (2014) found that Human Capital and Physical Capital had a non-significant influence on ~~Financial Conditions~~Financial Condition. However, they found it emerged after intervening through the culture. ~~While~~At the same time, Zulkifli et al. (2018) found contrasting findings where Human Capital and Physical Capital ~~had a positive effect on~~positively affected Financial Performance. Another finding suggested that the differences were caused by the influence of Indonesia's national culture. The level of uncertainty was ~~found to be higher in Indonesia than Australia which later reduce~~higher in Indonesia than in ~~Australia, which later reduces~~ the effect of any resources on financial performance (Graham and Sathye, 2017).

Additionally, pressure from the central government has imposed some policies in managing the budget in local government. Although provincial governments had adapted a new accounting system, ~~the issue was~~ the local officials found it difficult to maintain a well-controlled and structured system (Harun and Kamase, 2012). In a similar vein, Mir and Sutiyono (2013) have discovered that the demand, supply, and ~~the quality of Indonesian's local accounting system lacked of parity~~ quality of Indonesia's local accounting system lacked parity, which also means the financial system implemented less effective control. This, then, causes a subsequent effect on the local financial performance as ~~an~~ effective decision-making and efficient management would be difficult to implement. Thus, in this situation exhibiting an effective control in managing resources lead to better financial performance.

This investigation is necessary ~~in order to further understand~~ to understand further the antecedents of ~~financial conditions~~ Financial Condition and the role of effective management control. This study will also shed light on the importance of human and physical capital in developing regional financial Condition. Local governments in Indonesia may have undergone less effective control over the accounting system and failed to address the issue since their financial reports were in a category of acceptable without exceptions. Sulawesi Selatan, in this case, acted as the main gate of Eastern Indonesia, where many ~~important essential~~ important essential businesses happens. Despite the prestigious financial ~~condition~~ Condition, this local government was imposed to implement ~~ertain particular~~ ertain particular regulation from the central government. Additionally, some resources may have been used to support the financial performance. However, more empirical information is necessary to explore whether those resources influence ~~financial condition~~ financial Condition or not.

Then, the theory and empirical evidence led this study to exert a management control system as its ~~moderation moderating~~ moderation moderating variable on observing the influence of Human Capital and Physical Capital on the ~~Financial Conditions~~ Financial Condition of the area ~~which was~~ chosen in this study. ~~A fiscal decentralization decentralisation~~ Fiscal decentralization decentralisation is a government policy to increase the ability of an area to manage its own region. ~~The policy will make the distance between the government and the community will be tightened by the presence of government representatives in each region who can take their respective policies to maximize the services to the community, with the management of the economic resources in the region.~~ The local governments faced difficulties in implementing effective control system strategy because they were unable to link the relationship between Human Capital and the control strategy. As ~~the a~~ the a results, it caused the public services became less efficient.

Having considered the above discussions, the research objectives are formulated as follows;

1. To examine the effect of Human Capital on Regional ~~Financial Conditions~~ Financial Condition.
2. To examine the effect of Physical Capital on Regional ~~Financial Conditions~~ Financial Condition.
3. To examine the moderating effect of the Management Control System on the effect of Human Capital and Physical Capital on Regional ~~Financial Conditions~~ Financial Condition which are moderated by the Management Control System.

## LITERATURE REVIEW AND HYPOTHESES

The Public Sector Accounting Board (2007) defined the Financial Conditions Financial Condition as the health of government financial performances as indicated by their ability to fulfill the financial obligations and the service commitments to the public, creditors, employees and others. ~~While according to Dinapoli (2011), the~~ Financial Condition is the ability of the local governments to comply with the expenditure budget by taking the source of local revenue, and ~~continuously continue~~ providing services to the community.

Financial factors in Nirvana et al. (2014) ~~is a financial distribution which run~~ are a financial distribution run by the financial system. The financial system seeks to ensure adequate sound financial judgment and cover cover-up liquidity. ~~The Indicators of financial factors according to Dinapoli (2011) are the debt limits, the tax potential~~ According to Dinapoli (2011), the indicators of financial factors are the debt limits, the tax potential, and the legality of expenditure. ~~A Institutional factors according to Dinapoli (2011) are management practices and the existence of policies or regulations of local governments which guarantee the implementation of the~~ according to Dinapoli (2011), institutional factors are management practices and the existence of policies or regulations of local governments that guarantee the implementation of healthy governance. Furthermore, the institutional indicators are the budget and financial variance, the timeliness and accuracy of financial transactions, and the quality and timeliness of financial reporting.

In addition, Dinapoli (2011) stated that the Financial Conditions Financial Condition are determined by a combination of government environment, institutional and financial factors. For example, when there is a decrease in ~~the population of a government~~, so there will be a reduction in the tax revenue (negative environmental factors), ~~but. However,~~ the government can overcome this by reducing services, ~~Increasing the tax rate,~~ and striving for the development of to develop economic resources, which ultimately determine the Financial Condition of the local governments.

Financial ~~condition~~ Condition in at a regional level can be influenced by several factors such as CEO power (Daily and Johnson, 1997), environmental and operational management (Sueyoshi and Goto, 2010), and technical performance (Kristensen *et al.*, 2008). These antecedents can be grouped into two types of resource, namely human capital and physical capital. The former was workforce competencies (e.g. knowledge and skills), while the latter is more related to technology, devices, and equipment used to perform tasks in organisations. The human and physical capital will be the most two precious antecedents of ~~an~~ organisation's Financial condition Condition.

The notion of human and physical capital as key-critical antecedents of financial ~~condition~~ Condition has been supported by a theoretical perspective. A resource theory or commonly called Resource-Resource-Based Theory (RBT), uses a resource-based approach ~~in the analysis of to analyse~~ competitive advantages (Barney, 1991, 2001). The theory is used as a supporting theory in this study to see the effect of Human Capital and Physical Capital on regional Financial Conditions Financial Condition. The key to the RBT approach is a strategy of understanding the relation between valuable resources, organisation capabilities, competitive advantage, and profitability. In the end, all those resources should particularly provide supports for maintaining the competitive advantage over time.

The theory ~~firstly was first~~ introduced by Wernerfelt (1984) in his work entitled "*A Resource-based View of the Firm*". However, most of the researches referred to Barney's (1991) seminal work. The firm resources explained ~~about~~ how to help the company in improving the efficiency and effectiveness of operations. Furthermore, the competitive advantage can be understood by instilling an understanding of the company consists of heterogeneous and immovable elements. The steps in ~~maximizing maximising~~ the ~~competitive advantage of the company should fit into the four criteria, namely valuable, awareness, inimitability~~ any's competitive advantage should fit into the four criteria: valuable, awareness, inimitability, and non-substitutability.

According to RBT, the resources can be generally defined by including the assets, ~~organizational-organisational~~ processes, ~~organizational-organisational~~ attributes, information, or knowledge controlled by the ~~organizations-organisations which can be used to that can~~ compile and imply the strategies. Regardless ~~of~~ the number of resources, the RBT ~~categorizes-categorises~~ the resources into three major types;

- a. Physical Capital (e.g. technology, manufacturing, and equipment)
- b. Human Capital (e.g. training, experience, insight)
- c. ~~Organizational-Organisational~~ capital resources (e.g. formal structural)

Using the framework of the RBT, both Human and Physical Capital can maintain the quality of financial ~~condition-Condition~~ in an organisation, ~~this includes including~~ public organisation such as provincial governments. Human Capital would provide the organisation with desired human resources, ~~which directly influenced directly influencing~~ the quality of financial ~~condition-Condition~~. Financial ~~condition-Condition~~ needs skillful personnel and experts to secure the accountability of the reporting system, for example. The existence of these expected workforces will sustain the quality of financial ~~condition-Condition~~. The same case applies ~~for to the~~ Physical Capital, ~~o~~. An organisation with ~~abundant ready-to-use fruitful~~ tools, devices, and equipment will be more likely to exert those tools to support ~~the firm-organisation's achievement and provide achievement as well as providing~~ support for ~~F~~financial ~~condition-Condition~~.

The concept of RBT, in this case, also asserts that Human ~~Capital~~ and Physical Capital are able to create an ~~organization's-organisation's~~ competitive advantage ~~so-as~~ to generate ~~the~~ incremental values for the ~~organization-organisation~~. The value referred to the better performance in an ~~organization-organisation~~, including financial performance. Throughout the application of adequate Human Capital and supportive Physical Capital, provincial offices can provide more sufficient and complete information towards a better ~~F~~financial ~~C~~onditions (Ghozali and Chariri, 2007). Thus, the first two hypotheses are as follows:

Hypothesis 1 (H1): Human Capital has a positive effect on the Regional Financial Condition.

Hypothesis H2 (H2): Physical Capital has a positive effect on ~~Regional the Financial Conditions~~Financial Condition.

The supports from the two resources may not always provide desired effect on ~~F~~financial ~~condition-Condition~~ due to some conditions. For instance, previous studies have documented that

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organisational culture (Yesil and Kaya, 2013) and gender (Campbell and Mínguez-Vera, 2008) determined financial performance. Certain cultures may hinder the implementation of supportive human and physical capital. Likewise, gender-related injustice also impedes ~~proper-effective~~ Human Capital management. It appears that there ~~are-is~~ some degree of control ~~which-that~~ may potentially influence the effect of some resources on an organisation's financial achievement. It is plausible ~~to propose~~ that the ~~effect of the two key resources on financial condition is presumably moderated by the level of control~~ level of control presumably moderates the two key resources' effect on Financial Condition.

Human Capital and Physical Capital depend on the degree of control applied by organisational management. Management Control becomes much more ~~important-critical~~ in ensuring that the human and physical resources are in place to support Financial condition. Anthony and Govindarajan (2005) stated that ~~"Management control is a process by which managers influence other organizational-organisational members to imply the organizational-organisational strategies"-~~. It is also a process of detecting and correcting errors for accidental or intentional work. Since its focus is on humans and implementing plans, management control requires strong psychological ~~considerations~~ resources. Activities such as communication, advising, encouraging and ~~criticizing-criticising~~ are ~~important-essential~~ parts of this process.

Management control ~~utilizes-utilises~~ task control to ensure ~~the kind of effect and efficient work by considering three important areas namely~~ effective and efficient work by considering three critical areas: budgeting, economic ~~value-value~~-added, and balance scorecard (Otley, 1999). ~~Efficient describes how many inputs are needed to produce a unit of output while effectiveness is defined as the ability of a unit to achieve the desired goals. The most efficient organizational unit is the one that can produce a number of outputs with the use of minimal inputs or produce the most output with the available inputs.~~

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Control Theory of Strategic Human Resource Management (Snell, 1992) proposed that as an organisation expects a certain level of performance, it must implement a high degree of control over human resource management, particularly when the goals and incentives are less clear. This theory also suggests that control depends on the degree of standard exhibited by organisations. As goals and incentives are less known and the cause-effect knowledge of management seems a blur, high control is highly needed. Organisations may suffer from underachievement performance or serious issues related to ~~organizational-organisational~~ attainment.

The same case also applies ~~for-to~~ the Financial condition. Using this Control theory perspective, public sector financial condition ~~in-at~~ the regional level potentially requires some ~~degree-of~~ control in managing Human Capital and Physical Capital. The control should start from input, behavioural, and finally outputs. Human Capital management could support financial ~~condition-Condition~~ when the input (e.g. recruitment and selection) is ~~practiced-practised~~ with systematic control. Behavioural control is related to personnel's behaviours which also require control to direct personnel towards targeted goals. Output control means organisation, stakeholders, and employees should have a ~~erystalized-crystalised~~ standard of the desired output, and this standard is deemed to guide human capital management. Thus, the higher control

implemented by the organisations, the more positive the effect of Human Capital on Financial Condition.

Physical capital also demands ~~certain-specific~~ control in order to bring a positive impact on financial ~~condition~~Condition. As proposed by the Control theory (Snell, 1992), a clear and ~~crystalized-crystalised~~ standard is ~~important-vital~~ in developing control. Thus, a certain degree of control is essential to ensure that the physical resources ~~is-are utilized-utilised~~ to supporting ~~organisation-organisational~~ goals. According to the theory, input, behavioural, and output control are three ~~elements-of-control-system~~control systems elements. Physical Capital should also be controlled using this concept. Organisations with ~~high-degree-of-physical-resource-control-would-carefully-consider-physical-input, control-personnel-behavior-in-using-physical-assets-or-resources, and-physical-utility-output-would-be-evaluated~~a high degree of physical resource control would ~~carefully consider physical input, control personnel behavior in using physical assets or resources and evaluate physical utility output~~ with caution. By implementing this system, the positive effect of Physical Capital on Financial Condition will be considerably improved.

Latham and Locke (1979) also have strengthened the argument that a high degree of control may cause the financial resources (i.e. human and physical capital) are even impactful. The goal-setting theory (Latham and Locke, 1979; Locke *et al.*, 1981; Tosi *et al.*, 1991) postulates that clear and specific goals are proven to be more effective than “do your best” goals. The goals impact organisation as the degree of clarity is high, ~~and-this-which~~ also ~~apply-applies-for-to~~ Ffinancial Ccondition as the control over Human and Physical Capital are more ~~standardized-standardised~~ and ~~crystalizedcrystalised~~. Similarly, Snell (1992) found that clear standard played an important essential role in developing a better control system.

Given the ~~important-vital~~ role of control, this study proposes a management control system to control how the strategy in the company runs according to plans and objectives. According to Purnamasari (2009) ~~which-stated-that,~~ to encourage companies ~~to-be-able-to~~ compete in increasingly fierce global competitions, ~~professional managers must perform,~~ the mManagement control ~~Control System. is-an-absolute-requirement-that-must-be-conducted-by-the-professional-managers.~~It is a process and structure ~~which-systematically-arranged-by-management-in-controlling-activities-so-that-the-goals-and-objectives-set-by-the-company~~systematically arranged ~~by management in controlling activities so that the company's goals and objectives~~ can be achieved. Therefore, Management Control System will moderate the effect of Human Capital and Physical Capital on Financial Condition. The last two hypotheses will be:

Hypothesis 3 (H3): Management Control System moderates the relationship between Human Capital and Financial ConditionsFinancial Condition

Hypothesis 4 (H4): Management Control System moderates the relationship between Physical Capital and Financial Condition

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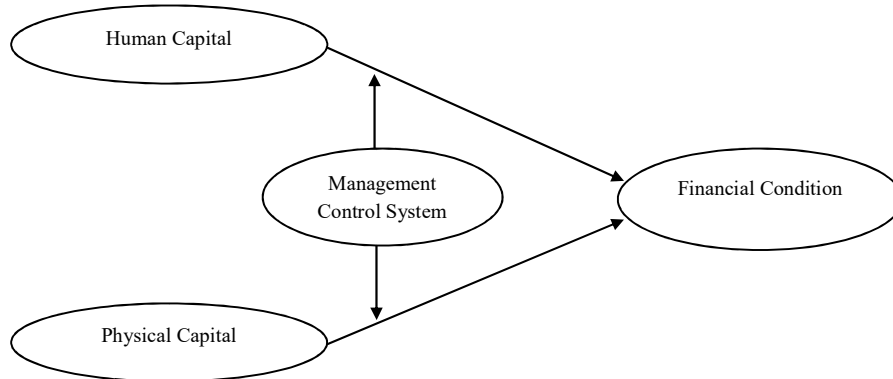


Figure 1. ~~Theoretical~~Theoretical Framework

### **Hypotheses**

Based on this framework, a conceptual framework is developed for this research as follows:

H1: Human Capital has a positive effect on the Regional Financial Condition.

H2: Physical Capital has a positive effect on the Financial Conditions.

H3: Management Control System moderates the relation between Human Capital and Financial Conditions

### **METHOD**

#### **Participants**

Participants were employees of the Regional Financial and Asset Management Agency who were served as the member of the Financial Report Compilation team in the Golden Triangle area of South Sulawesi. According to the human resource department, more than 100 employees worked in this team, and their jobs were related to financial evaluation and audit. Researchers had limited access to some information due to confidentiality reasons. The study was advertised to the three organisations, and participation was voluntary. The South Sulawesi Golden Triangle region was actually formed from a path connecting three regencies and big cities (Makassar, Gowa and Maros). Some participants worked as Secretary, Budgetary, Treasury, Accounting and Information Technology and Regional Assets. This study recruited five people in each division to obtain a sufficient sample. This study took 5 people in each field resulting in 25 participants in each region. Since there were three regions, this study received responses from 75 participants in total, which chosen randomly so that 25 samples per region could be obtained, and amount of 75 samples were obtained from three gold triangle regions. By implementing the G\*Power analysis the number of participants (n= 75) had enough power to eliminate the type II error (Faul et al.

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2007). The number of female participants ~~were was~~ 53% and male 47%, with most participants had bachelor degree ~~(81%)s~~ (81%) and some post-graduate degrees (19%).

### Measures

This study ~~used scale~~ employed measures which ~~were developed by the researchers~~ researchers developed ~~in accordance with~~ following the theory of each variable (Brislin, 1977; Hinkin *et al.*, 1997). There are four measuring instruments in this study. The following table describes the construction of the measure:

Table 1. Operational Variable

Variable	Dimension	Indicator
Human Capital (Mignonedan O'Neil, 2005)		1. Special Competence 2. Work Experience 3. Skill
	Physical Capital (Baldi, 2013)	1. Availability of Natural Resources and the Environment 2. Government <del>Investation</del> Investment 3. Facilities and Infrastructure (e.g., Computer and Internet Networks)
		Management Control System (Prabawati, 2010)
Financial Condition (Dinapoli, 2011)		
	Organization 1. Budget Cost 2. Timeliness and accuracy of financial transactions 3. Quality and timeliness of financial reporting	
	Financial 1. Limitation of Debt 2. Potential Taxes 3. Legality of Expenditures	

~~All~~ the measures were developed in Bahasa Indonesia using a 5-point Likert-type scale (1= Strongly Disagree to 5= Strongly Agree). ~~Human Capital Scale, Physical Capital Scale, and Management Control System Scale consisted of three items, while the Financial Condition Scale had 12 items. The items included "the organisation has many employees with special competence to accomplish challenging tasks" and "the organisation has implemented a well-designed evaluation system."~~ The measurement model, including construct validity and reliability, was examined to provide adequate support for the measurement model.

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To test the measurement model, this study performed a Confirmatory Factor Analysis (CFA) with four measures (i.e., Human Capital, Physical Capital, Management Control System, and Financial Condition). The hypothesized model was tested against other alternative models. The fit indices confirmed that the hypothesized model showed a better fit ( $cmin/df= 1.2$ ,  $p> 0.05$ ,  $RMSEA= .05$ , and  $SRMR= .04$ ) than the two-predictor model where Human and Physical Capital were combined ( $cmin/df= 2$ ,  $p> 0.05$ ,  $RMSEA= .08$ , and  $SRMR= .08$ ) and the single-predictor model where all predictors and Management Control System were combined in the model ( $cmin/df= 4$ ,  $p> 0.05$ ,  $RMSEA= .09$ , and  $SRMR= .098$ ). The results showed that the data had four independent constructs confirming the proposed theoretical model. Outer loading value indicated that the convergent validity of the data had coefficients above 0.50 for each item and the  $t$ -value for each item above 1.96. In addition, the value of Average Variance Extracted (AVE) in each construct variable was greater than 0.50. Based on the results of the analysis, all constructs fit into the convergent validity criteria. Those can be seen in the following table:

Table 2. Average Variance Extracted (AVE)

Variabel	AVE
Human Capital	0.617
Physical Capital	0.600
Management Control System	0.534
Financial Condition	0.702

Source: Primary data

The reliability test aims to examine the composite reliability of each variable measurement construct and also showed the appropriate value. The results suggested that the constructs had composite reliability coefficients above 0.70 (see table 3), confirming that the constructs had acceptable reliability.

Table 3. Composite Reliability

Variable	Composite Reliability
Human Capital	0.826
Physical Capital	0.818
Management Control System	0.931
Financial Condition	0.976

Source: Primary data

### Procedure

This research was part of a larger research program conducted by the regional financial institution. The data were collected by using a questionnaire which were developed in Indonesian. Data collection was conducted using a three-wave data collection technique to avoid common method biases (MacKenzie and Podsakoff, 2012). The survey booklets were delivered to the Human Resource Department (HRD) Office, and the HRD personnel sent the booklets to the

potential participants. In the first phase, researchers collected demographic, human capital and physical capital data. After a week, researchers ~~then~~ collected data for the Management Control System and the following week the Financial Condition data. Participants were asked to ~~commit to filling out~~ complete the questionnaire from the beginning to the end of the data collection, which lasted for one month. All participants ( $n=75$ , 100%) fully participated in the study from ~~beginning to the end of the data collection.~~

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## RESULTS AND DISCUSSION

### Results

This study conducted several stages in the data analysis. First, the data were ~~analyzed~~ analysed descriptively using descriptive statistics and the bivariate correlation technique. Secondly, the relationship ~~between the variables were was~~ tested ~~with using~~ Pearson Product-moment correlation. Lastly, the Hierarchical Moderated Regressions test (Anderson, 1986) ~~was conducted to answer hypotheses.~~

Table 4. *Descriptive Statistics and Bivariate Correlations*

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
Human Capital	11.43	1.21	=					
Physical Capital	11.79	1.23	.52**	=				
MCS	12.12	1.15	.45**	.54**	=			
FC(Environment)	22.90	2.52	.53**	.56**	.73**	=		
FC(Institution)	12.17	1.22	.30**	.34**	.62**	.78**	=	
FC(Financial)	12.26	1.35	.46**	.46**	.67**	.72**	.64**	=
FC Total	47.33	4.63	.50**	.53**	.76**	.86**	.87**	.85**

Note:  $N=75$ ,  $M$ = Mean,  $SD$ = Standard Deviation, MCS= Management Control System, FC= Financial Condition, \*\* $p<.01$

Table 4 above showed ~~the the average values~~ means and standard deviations for each variable in the study. In addition, the relationship ~~between variables was presented in the form of product moment correlation coefficient. Based on the analysis of that relation, it was generally concluded that~~ Generally, all variables in the study were positively and significantly correlated. The level of relation between these variables ranged from  $r=.34$  ( $p<.01$ ) to  $r=.86$  ( $p<.01$ ). The Human Capital had a ~~fairly~~ strong correlation with the Financial Condition ( $r=.50$ ,  $p<.01$ ), and so did the Physical Capital ( $r=.53$ ,  $p<.01$ ). The relation between the Management Control System and the Financial Condition was even stronger with the correlation coefficient ~~which reaching of~~  $r=.76$  ( $p<.01$ ). The results indicated that the two independent variables (i.e. Human Capital and Physical Capital) and Management Control System ~~as moderator variables~~ had a strong positive relationship ship with Financial Condition.

After ~~knowing the relation between variables performing the descriptive statistics and bivariate correlation,~~ ~~then~~ the Hierarchical Moderated Regressions analysis was performed. In this study, the regression technique was considered appropriate to examine the contribution of each

predictor in different regression models (de Jong, 1999). The following were the results of the analysis:

Tabel 5. Moderated Regressions with Financial Condition as Dependent Variable

Model		$R^2$	Adj. $R^2$	$\Delta R^2$	$\Delta F$	$\beta$
1	Human Capital	.25***	.24	-	24.81	.50***
2	Human Capital Physical Capital	.35**	.33	.10**	10.86	.31** .37**
3	Human Capital Physical Capital HC*MCS	.36**	.34	.01	1.47	.32** .37** -.12
4	Human Capital Physical Capital HC*MCS PC*MCS	.43**	.40	.06**	7.98	.33** .33** -.33** .34**

Note:  $N=75$ ,  $\Delta$ = change,  $\beta$ = Standardized Beta Weight, HC= Human Capital, PC= Physical Capital, \*\*\*  $p < .001$ , \*\*  $p < .01$

~~Hierarchical Regression Analysis with moderated regression was performed.~~ This analysis technique allowed researchers to capture the incremental contribution of each predictor variable which entered in the models. Before running the analysis, all predictors and the moderating variable were mean-centred to eliminate the risk of multicollinearity (Hayes, 2013). The first model, with Human Capital as the only predictor, With Human Capital as the only predictor, the first model showed a significant impact on the Financial Condition ( $Adj. R^2 = .25, p < .001$ ). In the second model, Physical Capital was entered, and it contributed a positive and significant added value to the Financial Condition prediction model ( $\Delta R^2 = .10, p < .01$ ). In model 3, interaction between Human Capital and Management Control System did not significantly increase the predicted value the variance of the Financial Condition ( $\Delta R^2 = .01, p > .05$ ). Model 4 was the regression model that gave the highest contribution to the variance of the Financial Condition in the presence of the additional interaction variables of Physical Capital and Management Control System ( $\Delta R^2 = .06, p < .01$ ). In model 4, all predictors and the two interactions significant predicted Financial Condition. However, the interaction between Human Capital and Management Control System contributed a negative effect on Financial Condition.

The analysis showed that the impact of Human Capital on Financial Condition Financial Condition was proven to be positive and significant across all regression models. When there were no other variables in the model, the impact of Human Capital on Financial Conditions Financial Condition tended to be strong ( $Adj. R^2 = .24, \beta = .50, p < .001$ ). The impact of Human Capital Financial Conditions Financial Condition remained positive and significant across all the regression models, including in model 4 ( $Adj. R^2 = .40, \beta = .33, p < .001$ ). Based on these results the H1 was accepted which meant the Human Capital had a positive effect on the Financial Condition Financial Condition, which provided support for H1.

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Figure 2. Empirical model and coefficients

Figure 3 below illustrates the interaction between Human Capital and Management Control Systems in predicting Financial Conditions. The graph explained that the value of the prediction model was higher when the Management Control System was at a low level ( $R^2 = .156$ ), compared to when it was at a high level ( $R^2 = .131$ ). So that the existence of a high Management Control System could reduce the impact of Human Capital on Financial Conditions.

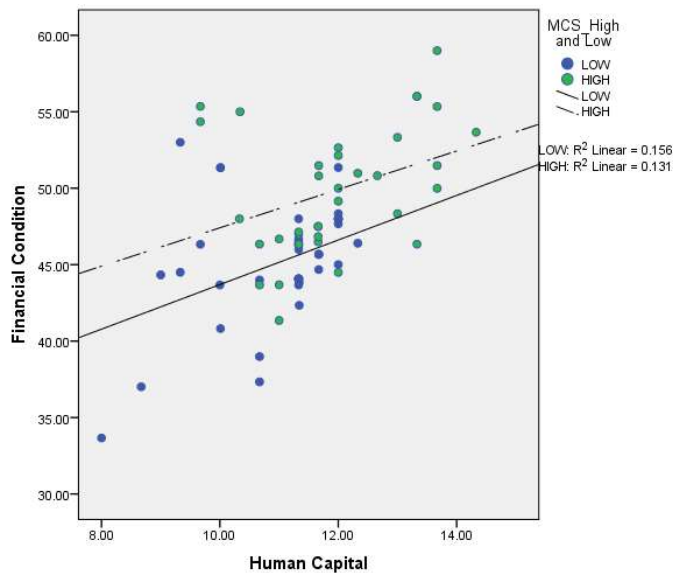


Figure 3. Interaction between Human Capital and Management Control System

The interaction between Physical Capital and Management Control System can be seen in Figure 4. Unlike the previous interaction models, the interaction in figure 4 showed that the impact of Physical Capital on Financial Conditions was stronger when the Management Control System was also at a high level ( $R^2 = .2217$ ), compared when dealing compared to low levels ( $R^2 = .074$ ). A high Management Control System could support the positive impact of Physical Capital on Financial Conditions. The low Management Control System could result in the low impact of Physical Capital on Financial Conditions.

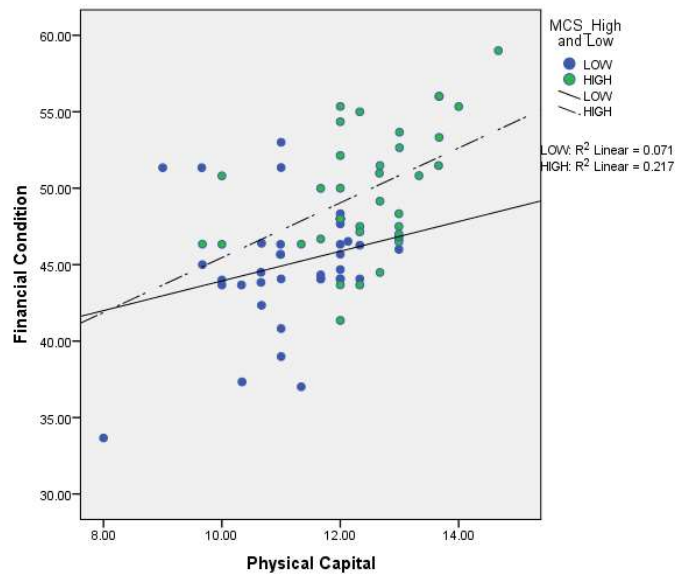


Figure 4. Interaction between Physical Capital and Management Control System

## DISCUSSION

### *The Effect of Human Capital on Financial Condition*

The analysis showed that Human Capital had a positive influence on Financial Condition. Based on the analysis, the higher Human Capital in the terms of special (e.g., competencies, work experience and skills), the more likely Financial Condition leverages in Makassar, Gowa and Maros the golden triangle areas. This suggests that Human Capital affects environmental, institutional, and Financial Conditions of these three areas. In this study, a successful financial condition referred to the environment, institution and financials dimensions in three key areas of South Sulawesi (i.e. Makassar, Gowa and Maros).

Firstly, within the environmental dimension ~~there were community needs, population~~ property values, inflation, individual income and budgeting, all these, there were community needs, populations, property values, inflation, individual income, and budgeting, all of which were necessary to establish a stable Financial Condition. Secondly, human resources also contribute to institutional ~~dimensions of~~ financial performance. Human Capital aspects supports ~~the organisation strategic in which there was availability of budget, timeliness and accuracy of financial transactions and the the organisation strategy, including the availability of budget, timeliness and accuracy of financial transactions,~~ quality, and timeliness of financial reporting. Lastly, the workforce competence also ~~provided supports for~~ supports the financial dimension, which included debt limits, tax potential and legality of expenditure. Successful financial dimension, in this regard, relied upon the workforce competence. Human capital serves as a means to monitor debt limits and tax management, for example. ~~So~~ The increase

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(or decrease) in Human Capital ~~had will influence an influence on~~ the regional Financial Condition ~~Financial Condition of the government in these regions. Similar research was also found~~ This notion has been previously supported by Zulkifli (2018), Ramli et al. (2014), Nimtrakoon (2015), Ervina et al. (2008), Is et al. (2014), ~~which stated that Human Capital had a positive effect on Financial Conditions.~~

The RBT (Barney, 1991, 2001) has explained the importance of valuable and rare resources in fostering organisation competitive advantages. Human Capital also acted as a valuable resource for ~~organizational organisational success which also includes, including~~ financial achievement within the organisation. As the organisation maintains sufficient quality of Human Capital, the workforce will strive to facilitate sustainable financial performance. Thus, according to this study, the RBT successfully explained the role of Human Capital in predicting Financial Condition ~~Financial Condition~~.

Special competence, work experience ~~and skills became important points in improving~~ Financial Conditions because with those could be an important part in improving innovation, strategies and objectives of the organization, and skills became important points in improving Financial Condition because those could be an essential part of improving the organisation's innovation, strategies, and objectives. In this study, P ~~participants perceived assumed~~ that the development of H ~~human~~ C ~~apital was also able to increased~~ the ability of an area in improving the economy and maximizing regional government's ability to improve the economy and maximise its potential. ~~but this study assumed that it is unable to affect the company's Financial Condition.~~

— This research ~~reinforced the notion postulated~~ that the role of Human Capital in regional government needed to be reconsidered because the better Human Capital was able to can strengthen the achievement of the objectives goal attainment of a an are regional government. The fulfillment of the needs of the residents of an area could be improved with the support of good Human Capital.

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### ***The Effect of Physical Capital on Financial Conditions Financial Condition***

The results showed that Physical Capital had a positive effect on ~~the~~ Financial Conditions ~~Financial Condition~~. The level of Physical Capital in terms of the availability of natural resources and the environment, government investment, facilities and infrastructure (e.g. computers, internet access) had a significant impact on ~~the fulfilment of the environmental, institutional, and financial sectors in the government areas of Makassar, Gowa and Maros~~ Financial Condition in the three regional areas. Physical Capital contributed positive ~~impact only to leveraging the areas'~~ Financial Condition ~~Financial Condition, which also included including~~ fostering environmental, institutional, and financial aspects.

As mentioned earlier, there are ~~three here~~ distinct dimensions of Financial Condition, namely the environment, institutions and finances. These three ~~aspects dimensions were applied to depict the financial achievement of local government~~ local government's financial performance in South Sulawesi (i.e. Makassar, Gowa and Maros). In ~~leveraging improving~~ financial condition ~~Condition~~, the regional governments should ~~serutinize take into account~~ the community needs, populations, property values, inflation, individual income and budgeting. The second dimension was the institution, ~~which covers in a sense that there was~~ budget availability, timeliness

and accuracy of financial transactions, and the quality and timeliness of financial reporting. The third dimension was finance which covered debt limits, tax potential and legality of expenditure.

The RBT has supported that Physical Capital (e.g. technology) has provided valuable resources for the governmental organisations in South Sulawesi, Indonesia. ~~The theory and previous findings have been supported by this empirical study~~ is empirical study has supported the theory and previous findings. Physical Capital had ~~significant positive influence on the Financial Condition of the government~~ a significant positive influence on the regional government's Financial Condition in these three regions; ~~Makassar, Gowa and Maros~~. Barney (2001) proposed that ~~the~~ competitive advantages of an organisation can be achieved by ~~utilizing~~ utilising existing valuable and rare resources in ~~the~~ organisation. Consistently, in the case of local government organisations in Indonesia, it appeared that Physical Capital added ~~a~~ significant amount of incremental variances to the development of ~~Financial Condition~~ Financial Condition. Physical assets, technologies, devices and other facilities were viewed as the essential elements of ~~a~~ successful ~~Financial Conditions~~ Financial Condition.

This study was also in line with research conducted by Zulkifli (2018), Nimtrakoon (2015), Ervina et al. (2008), Is et al. (2014). However, the effect could be indirect as other variables ~~also~~ might ~~also~~ influence the relationship. For example, Nirvana et al. (2014) discovered that Cultural Capital moderated the Physical Capital - ~~Financial Conditions~~ Financial Condition relationship. Therefore, this study also considered testing the ~~moderating~~ effect of ~~the~~ Management Control System in ~~moderating the effect~~ the relationship.

Limitations of Physical Capital ~~were~~ often became a problem of a local government regardless ~~of~~ the quality of Human Capital. Generally, regions ~~that had~~ with outstanding ~~H~~ human ~~C~~ capital would be more developed if juxtaposed with the availability of natural resources and the environment, adequate government investment, facilities and infrastructure ~~(e.g. computers)~~. In this study, it seems in this study, the participants considered that Physical Capital in a form of technologies, facilities and infrastructures provide significant supports, in the form of technologies, facilities, and infrastructures, provided significant support for the region's Financial Condition ~~Financial Condition~~.

### ***The Moderation Effect of Management Control System on the Relation of Human Capital and Financial Condition***

Apart ~~for from~~ the direct effect of Human Capital on ~~Financial Condition~~ Financial Condition, this study also found that Management Control System moderated the effect of Human Capital on ~~Financial Condition~~ Financial Condition. This research was supported by the Control Theory (Snell, 1992) as the theory stated that managing human resources must be supported with input, behavioural, and output control. In addition, the Control Theory and the Goal Setting (Latham and Locke, 1979) postulated that clear and ~~erystalized~~ crystalised standard potentially ~~emphasize~~ emphasise the effect of resources. ~~In addition~~ Besides, the ~~goal goal~~ goal-setting principles have stressed enough ~~on~~ the importance of specific and clear goals. ~~Say it differently, these theories have the theoretical background has assumed~~ supported the notion that ~~organisations a company~~ with supportive human resources but ~~zero~~ unspecified goals and rules would experience constraints to rise their ~~Financial Condition~~ Financial Condition.

This study discovered ~~an~~ interesting findings related to the moderation effect of the Management Control System. The presence of a lower degree of Management Control System could trigger improvement in local government organisation. In contrast, a high degree of Management Control System would reduce the effect of Human Capital on ~~Financial Condition~~Financial Condition. The theories have supported that Management Control System facilitated the Human Capital – ~~Financial Condition~~Financial Condition relationship. The moderating effect seems to be more positive as the theories suggested that a clear and standardized specific goal of Human Capital in human resource management could improve ~~Financial Condition~~Financial Condition. However, this study showed opposing evidence as the moderating effect was found to be negative. This indicated that the existence of a Management Control System could weaken the role of Human Capital on ~~Financial Condition~~Financial Condition.

In the local government areas, Human Capital significantly determined the fluctuation of ~~Financial Condition~~Financial Condition. However, as the Management Control System implemented with a considerably high degree of input, behavioural, and output control, Human Capital would be less influential. The Management Control System improves ~~the~~ Human Capital management by standardizing ~~standardising~~ control over the input quality, specifying work behaviour, and directing control to attain desired output. The government officials could have perceived Human Capital as an insignificant resource as the ~~management of the human resources~~human resources management was highly controlled. ~~Simply, –~~ The local regional governments could have discarded the importance of Human Capital for ~~Financial Condition~~Financial Condition as they perceived a high Management Control System.

The results of this study were in line with the research conducted by Chandra (2017), Ong et al. (2016), Rachma (2014), where they all found that the Management Control System had a significant influence on Human Capital and ~~Financial Conditions~~Financial Condition. However, ~~despite the effect, scholars and government officials should consider how the Human Capital and Management Control System interact to predict Financial Conditions~~scholars and government officials should consider how the Human Capital and Management Control System interact to predict Financial Condition. In terms of predicting the local government Financial Conditions, as the degree of Management Control System increases the Human Capital impact on Financial Condition declines As the Management Control System increases, the Human Capital impact on Financial Condition declines. Thus, ~~Organisations that have a poor Management Control System may require high quality of Human Capital~~organisations with a flawed Management Control System may require high quality of Human Capital to improve financial conditions.

#### ***The Moderation Effect of Management Control System on the Relation of Physical Capital and ~~Financial Condition~~Financial Condition***

~~The results of~~ this study also indicated that the Management Control System ~~was able to moderate~~moderated the effect of Physical Capital on ~~Financial Conditions~~Financial Condition. The relation between Physical Capital and ~~Financial Conditions~~Financial Condition is ~~increasing as the Management Control System~~increased as the Management Control System was included in the prediction model. As predicted previously using the Control Theory by Snell (1992), a high degree of control over input, behaviour, and output ~~also improved~~d the quality of Physical Capital.

In this respect, Physical Capital could be more influential as the Management Control System ensured its quality by controlling input of physical resources, controlling behaviours in utilizing the resources, and directing the outputs of using the resources. This study suggested that As the Management Control System increases, it improves the effect of Physical Capital on Financial Condition Financial Condition.

Unlike the former moderating effect, Management Control System and Physical Capital went hand-in-hand in predicting Financial Condition Financial Condition. It indicated that the effect of the effect of Physical Resources-Capital on Financial Performance-Condition depended on the degree of the control system in within the organisation. Organisations with abundant of Physical Resources may not always provide high performing Financial Condition unless they implement high state of Management Control Physical Capital may not always lead to high performing Financial Condition unless they implement a favourable Management Control System. This shades sheds the light on the importance of the Management Control System in supporting facilitating the role of Physical Capital. Hypothetically, if the organisations tend aim to have less fewer p Physical r Resources, managing the resources using the Management Control System principles will accentuate the effect of the resources on the organisations' Financial Condition Financial Condition.

The results were in line with some previous investigations conducted by Chandra (2017), Ong et al. (2016), and Rachma (2014). In those studies, Management Control System was one of the predictors of Financial Performance in organisations. The effect of Management Control System Management Control System's effect is important vital as it serves as control over resources availability and quality. Anthony and Govindarajan (2005) stated that Management Control System was also a process for detecting and correcting errors at work. The focus is on human behaviours and the implementation of plans. The focus on behavioural control also requires a strong psychological aspects.

In the local-regional government organisation offices, the three golden areas of South Sulawesi may have relied on the level of Management Control System to attaining Management Control System to attain an expected level of Financial Condition Financial Condition. In this regard, the regional government official should strive to optimize-optimise the control over the physical resources. The control system should manage the selection of equipment, human behaviours related to the application of the equipment; and it also should monitor the effect iveness of certain specific technologies or devices on outputs. Physical Capital positively predicts the local-regional government Financial Condition Financial Condition as far as the physical resources controlled with systematic procedure starting from input to output.

### **Implications**

This research empirically examined the influence of moderating effect of Management Control Systems on the two antecedents of the local-government regional financial condition Financial Condition-antecedents; Human Capital and Physical Capital. The results provided support supported that the perceived Management Control System significantly determined the effect of Human Capital and Physical Capital Human Capital and Physical Capital's effect on Financial Condition Financial Condition. However, this moderator behaved differently

towards Human and Physical Capital in the regional government organisations. Management Control System tended to alter the low quality of Human Capital while at the same time strengthen the Physical Capital – ~~Financial Condition~~ Financial Condition Relationship.

~~In a case where~~ the ~~local-regional~~ governments implement a high Management Control System, the Physical Capital will be more likely to foster ~~Financial Condition~~ Financial Condition. Unfortunately, this condition will also reduce the Human Capital's effect on ~~Financial Condition~~ Financial Condition. Albeit the organisations have exhibited sufficient workforce competence, it will have less impact on the ~~Financial Condition~~ Financial Condition as the Control System is highly managed. Presumably, outstanding Human Capital can tolerate a ~~poor-flawed~~ Management Control System and still positively impacts ~~Financial Condition~~ Financial Condition. Control System is ~~important-vital~~ for directing the effect of resources on ~~Financial Condition~~ Financial Condition. However, ~~the local government officials, in this case, in this case,~~ the local government officials should be aware that increasing control over Human Capital can reduce the effect of human resources on ~~Financial Condition~~ Financial Condition. Human Capital in the local government areas may not ~~have less impact on~~ impact financial performance as the organisations implement high control system.

#### ***Limitations and Future Research Directions***

This study employed a set of questionnaire as valid and reliable measures of variables being studied. The initial attempt was to collect objective data. However, the existing objective data were not adequately ~~standardized-standardised~~ across different organisations. ~~The data~~ Accessing the data and information related to the objective financial record ~~were was~~ also strictly prohibited ~~for non-official parties~~. Likewise, researchers cannot find alternative objective data that ~~definitely~~ measured the level of achievement of the whole existing variables, other than the ~~opinions perception~~ of employees who work in the ~~organization~~ organisations. This study, then, ~~employed used~~ Subject Matter Experts (SMEs) perception ~~towards-of~~ each variable, ~~in the study and this procedure was supported by the authorities~~ this procedure had been permitted by the research ethics committees and the government officials. Therefore, future studies can repeat this method using objective data sources from government officials by establishing mutual collaborations.

Furthermore, although this research succeeded in involving representatives from all agencies with varying ~~levels of position, the number of participants involved was still small compared to some positions,~~ the number of participants involved was still small compared to previous studies. By increasing the number of participants and involving more governmental organisations, ~~the~~ future studies would provide more information regarding the effect of ~~the~~ control system in the regional government organisations.

#### **CONCLUSIONS**

This study has two folds. Firstly, it contributed ~~a new information~~ related to about the effect of two key resources (i.e. Human and Physical Capital) on financial performance in governmental organisations. Secondly, this study broadens our understanding ~~towards-of~~ the unique role of ~~the~~ Management Control System in the local government organisations in South Sulawesi, Indonesia. The first part of the findings was consistent with the RBT as both Human and Physical Capital

significantly predicted ~~Financial Condition~~Financial Condition. However, the second part of the findings was mixed as Management Control System negatively moderated the effect of Human Capital while at the same time also positively moderated the effect of Physical Capital on ~~Financial Condition~~Financial Condition. This study highlighted the importance of improving the standard of ~~the~~ control system in managing the local government organisations. Although it potentially reduces ~~the effect of Human Capital, high degree of control will help organisations to~~Human Capital's effect, a high degree of control will help organisations maintain ~~and improve desired-desirable~~Financial ConditionsFinancial Condition.

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APPROVAL NOTICE

No. 2017/UNH-4/KP.06-10/2020

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Project Title	:	Human Capital and Physical Capital in Regional Financial Condition
Project ID	:	UH.EB.005.01.03.20
Project start date	:	10 January 2020
Project end date	:	10 January 2021

The above proposed project has been **approved** based on the information given in the application and its attachments. Please inform the *Social and Behavioral Research Ethics division at Universitas Hasanuddin*, if the above research project is discontinued before the expected date of completion. In addition, you are required to report anything which might warrant review of ethical approval of the protocol, this might include:

- serious or unexpected adverse impacts on participants
- Amendments in the protocol
- Changes to the research team

Please reach the office of Research Ethics at Fakultas Ekonomi dan Bisnis, Universitas Hasanuddin if this project requires amendments or extension. Your report is due on the completion of the project.

Makassar, 05 January 2020

Dekan,



**Prof. Dr. Abd. Rahman Kadir, SE., M.Si., CIPM**  
Fakultas Ekonomi dan Bisnis Universitas Hasanuddin

### INFORMED CONSENT

Title of Research: Human Capital and Physical Capital in Regional Financial Condition

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- 1. Introduction and Purpose of the Study**  
*This study aims to investigate employees' perception about their daily work routine which includes their idea about their performance and experience in the workplace.*
- 2. Description of the Research**  
*In this study you will be asked to complete questionnaires. The questionnaire will come in three times in every two weeks. Each questionnaire will take up to 15 minutes to complete.*
- 3. Participation**  
*We estimate there will be 100 employees participate in this study. They will come from the Regional Financial and Asset Management Agency team in the Golden Triangle area of South Sulawesi. As a participant, you will receive a survey booklet three times every two weeks. Your decision to participate in this study is complete voluntary. If you decide to not participate in this study, it will not affect the care, services, or benefits to which you are entitled.*
- 4. Potential Risks and Discomforts**  
*You may experience some discomforts in filling the questionnaire. If you do not feel comfortable enough to answer the questions, you can stop at any point. You can withdraw from the study at any point and your decision will not affect your job, the care, service, or benefits to which you are entitled. This study and your participation will not impact your job or your performance report.*
- 5. Potential Benefits**  
*People who participate in this study may better understand the link between human resources and financial condition.*

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# THE EFFECT OF HUMAN CAPITAL AND PHYSICAL CAPITAL ON REGIONAL FINANCIAL CONDITION: THE MODERATING EFFECT OF MANAGEMENT CONTROL SYSTEM

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## Abstract

This study aims to examine the effect of Human Capital and Physical Capital on Regional Financial Condition with a Management Control System as moderator. Participants were employees of the Regional Financial and Asset Management Directorates which were located in three major cities/districts in the province of South Sulawesi, Indonesia. The 75 randomly selected participants involved in a three-wave data collection procedure. Four measures were developed (i.e. Human Capital, Physical Capital, Management Control System, and Financial Condition) which were found to be constructively valid and reliable for research purposes. The results showed that the Human Capital and Physical Capital directly influenced the Financial Conditions. The effect of Human and Physical Capital were moderated by the Management Control System. Management Control System negatively moderated the effect of Human Capital while at the same time also positively moderated the effect of Physical Capital on Financial Condition. This study collected participant's perceptions towards the study variables without any further investigation to the objective measures. Although, some scholars may find this as the lack of evidence against the actual financial conditions, acknowledging experts' perceptions should provide a better understanding on the experienced financial condition. Various studies have investigated some factors which may affect the Financial Conditions. However, this study proposed an examination of the role of Management Control System. In this case, a capital which is owned by the financial organizations cannot provide a direct impact on the Financial Conditions if there is no role of the Management Control System.

**Keywords:** human capital, physical capital, management control system, financial condition, and Indonesia

## INTRODUCTION

Financial Condition is determined by the ability of an area to fulfill an obligation for prospering or serving a community. In this regards, there are three core dimensions to evaluate the financial conditions they are environmental, institutional and financial dimensions (Dinapoli, 2011). These three dimensions will be interconnected to produce a sufficient Financial Condition.

By fulfilling all these dimensions, government will be able to bring more stable financial conditions.

Firstly, the environmental dimension is the assessment of Financial Conditions which assessed based on how a government supports or impedes regulations, especially on bringing innovations to the community. Secondly, the institutional dimension is a management practice and legislative policy which guides the fiscal decision making. Its function is often as a response to the environmental or political factors (Dinapoli, 2011). Lastly, financial dimension is most related to financial performance. This particular dimension includes potential tax or incomes in a particular region and a debt limit and a legality of expenditure from a region. For some countries, it also consists of fiscal decentralization management in which each region will obtain a budget for the funds to be managed.

One of the most important questions to this issue is, what are variables may potentially predict financial conditions. Considering the important roles of resources, the Resource Based Theory (Barney, 1991) supports the notion that Human Capital and Physical Capital provides significant resources for maintaining sufficient financial conditions. Human capital becomes considerably important because it is a source of innovation and strategy renewal. Human Capital is related to any knowledge, skills, abilities and attitudes owned by personnel in organisations which are highly supportive for organizational success (Perrotta, 2018). Further, it can be fostered from an applied research, management objective, reengineering process and improvement or development of workforce skills. Furthermore, human capital creates incremental values to organisations on a daily basis, via motivation, commitment, competence and effectiveness of the teamwork. However, each organization offers distinctive approaches in managing human capital and it also means different values (Lepak and Snell, 2002). Thus, human capital provides unique contributions to financial condition based on unique approaches given by organisations.

In addition to Human Capital, Physical Capital also adds incremental variance to the successful financial conditions. The notion of Physical Capital includes natural resources and other technological devices (Galor and Moav, 2004). The existence of Physical Capital supports the improvement of the Financial Condition of an area. To illustrate, the development of the basic physical conditions such as sanitation, clean water, and electricity in an area will also help to foster the services and welfare for the community which may later improve Financial Conditions. Physical Capital is also useful for creating additional values to producing desired input. Thus, it is reasonable to conclude that both human and physical resources act together to influence a region financial condition.

The direct effect of these two capitals (i.e. human and physical) may have been moderated by the level of control performed by organisations. In Indonesia, some empirical investigations conducted by Chandra (2017), and Sari and Fitriani (2009) found that the management control system was able to improve Financial Conditions. In these two studies, Human Capital and Physical Capital directly impacted financial performance where the organisations had sufficient control over the resources. As a result, the organisations performed better and showed expected financial conditions.

The concept of Control theory in strategic human resource management from Snell (1992) has provided a clear arguments on how high control facilitates positive effect of human capital and

physical capital on desired financial conditions. According to the theory, Human Capital and Physical Capital will leverage financial performance only if an organisation implement certain degree of control over human capital inputs, behavioural controls, and desired outputs. This further suggests that possessing a management control system favours the effect of Human and Physical Capital on Financial Conditions.

Accordingly, management control system becomes a moderation in creating good Financial Condition for one particular region. In a developing country like Indonesia, the management control system is one of the strongest foundations of good governance (Purnomo, and Budiawan, 2014). The internal control system includes various management tools that aim to achieve a broad range of objectives. In addition, Riawan (2016) stated that the management control system is able to improve the Financial Condition of an organisation. Meanwhile, Masyur (2016) postulated that local governments encounter difficulties in implementing a good control system strategy because the absence of synergy between Human Capital and the control strategy. Subsequently, this made the public services became less efficient. Control becomes a crucial element to ensure that financial condition is achieved as expected.

Management control system consists of management control structures and processes (Halim et al., 2012). The control structure is centered on a variety of responsibility centers, while the management control process includes budget preparation, implementation and measurement as well as reporting and analysis. In the process of the management control, the decisions are made based on the procedures and other schedules which carried out repeatedly year after year. Those procedures usually start from programming. The program is translated into the form of a budget, then the company operates based on a predetermined budget, procedure and policy. The final results are then compared with the budget, after being evaluated and improved if necessary. Since the procedure is carried out repeatedly every year, then management requires a management control system to improve its performance so that the company's goals can be achieved.

By applying the Resource Based theory and Control theory in Strategic Management, one should be able to capture that the presence of high management control will leverage the effect of human and physical capital on financial condition. However, some contextual conditions may also influence this argument. For instance, Indonesia as a developing countries implements a desentralisation policies which also include financial autonomy for its provinces. Consequently, some experts and practitioners have questioned about some antecedents related to regional financial performance.

Law No. 23 of 2014 states the implementation of regional government directed to accelerate the realization of community welfare through improving services, empowerment, and community participation, as well as enhancing regional competitiveness by taking it into an account of the principles of democracy, equality, justice, and uniqueness of the area in the system of the Unitary State of the Republic of Indonesia. Regional autonomy is a part of decentralization. It constructs each region to have the right and obligation for regulating their own area but with the control of the central government and in accordance with the law. A fiscal decentralization is implemented in order to encourage several levels of government which are able to control each region. The local governments in each region will accommodate the aspirations of a community and be obliged to prosper the community in terms of services. The success of a regional autonomy

is integrated with the ability of a region to manage the funds that have been budgeted to its area. In addition, the local governments should also be able to utilize the resources that are already owned by the region. Therefore, the success of a regional autonomy significantly is related to the Financial Condition of the region.

Unfortunately, contrasting views emerged regarding the effect of Human Capital and Physical Capital on Financial Conditions in Indonesia. For instance, Nirwana and colleagues (2014) found that Human Capital and Physical Capital had non-significant influence on Financial Conditions. However, they found it emerged after intervening through the culture. While, Zulkifli et al. (2018) found contrasting findings where Human Capital and Physical Capital had a positive effect on Financial Performance. Another finding suggested that the differences were caused by the influence of Indonesia's national culture. The level of uncertainty was found to be higher in Indonesia than Australia which later reduce the effect of any resources on financial performance (Graham and Sathye, 2017).

Additionally, pressure from the central government has imposed some policies in managing budget in local government. Although provincial governments had adapted a new accounting system, the issue was the local officials found it difficult to maintain a well-controlled and structured system (Harun and Kamase, 2012). In a similar vein, Mir and Sutiyono (2013) have discovered that the demand, supply, and the quality of Indonesian's local accounting system lacked of parity which also means the financial system implemented less effective control. This, then, causes a subsequent effect on the local financial performance as an effective decision-making and efficient management would be difficult to implement. Thus, in this situation exhibiting an effective control in managing resources lead to better financial performance.

This investigation is necessary in order to further understand the antecedents of financial conditions and the role of effective management control. Local governments in Indonesia may have undergone less effective control over accounting system and failed to address the issue since their financial reports were in a category of acceptable without exceptions. Sulawesi Selatan, in this case, acted as the main gate of Eastern Indonesia where many important businesses happens. Despite the prestigious financial condition, this local government was imposed to implement certain regulation from the central government. Additionally, some resources may have been used to support the financial performance. However, more empirical information is necessary to explore whether those resources influence financial condition or not.

Then, the theory and empirical evidence led this study to exert management control system as its moderation variable on observing the influence of Human Capital and Physical Capital on the Financial Conditions of the area which was chosen in this study. A fiscal decentralization is a government policy to increase the ability of an area to manage its own region. The policy will make the distance between the government and the community will be tightened by the presence of government representatives in each region who can take their respective policies to maximize the services to the community, with the management of the economic resources in the region. The local governments faced difficulties in implementing effective control system strategy because they were unable to link the relationship between Human Capital and the control strategy. As the results, it caused the public services became less efficient.

Having considered the above discussions, the research objectives are formulated as follows;

1. To examine the effect of Human Capital on Regional Financial Conditions.
2. To examine the effect of Physical Capital on Regional Financial Conditions.
3. To examine the effect of Human Capital on Regional Financial Conditions which are moderated by the Management Control System.

## **LITERATURE REVIEW AND HYPOTHESES**

The Public Sector Accounting Board (2007) defined the Financial Conditions as the health of government finances as indicated by their ability to fulfill the financial obligations and the service commitments to the public, creditors, employees and others, While according to Dinapoli (2011), the Financial Condition is the ability of the local governments to comply the expenditure budget by taking the source of local revenue, and continuously providing services to the community.

Financial factors in Nirvana et al. (2014) is a financial distribution which run by the financial system. The financial system seeks to ensure adequate financial judgment and cover up liquidity. The Indicators of financial factors according to Dinapoli (2011) are the debt limits, the tax potential and the legality of expenditure. Institutional factors according to Dinapoli (2011) are management practices and the existence of policies or regulations of local governments which guarantee the implementation of the healthy governance. Furthermore, the institutional indicators are the budget and financial variance, the timeliness and accuracy of financial transactions, and the quality and timeliness of financial reporting.

In addition, Dinapoli (2011) stated that the Financial Conditions are determined by a combination of government environment, institutional and financial factors. For example when there is a decrease in population of a government, so there will be a reduction in the tax revenue (negative environmental factors), but the government can overcome this by reducing services. Increasing the tax rate, striving for the development of economic resources which ultimately determine the Financial Condition of the local governments.

Financial condition in a regional level can be influenced by several factors such as CEO power (Daily and Johnson, 1997), environmental and operational management (Sueyoshi and Goto, 2010), and technical performance (Kristensen et al., 2008). These antecedents can be grouped into two type of resource namely human capital and physical capital. The former was workforce competences (e.g. knowledge and skills), while the latter is more related to technology, devices, and equipment used to perform tasks in organisations. The human and physical capital will be the most two precious antecedents of organisation's financial condition.

The notion of human and physical capital as key antecedents of financial condition has been supported by a theoretical perspective. A resource theory or commonly called Resource Based Theory (RBT) uses a resource-based approach in the analysis of competitive advantages (Barney, 1991, 2001). The theory is used as a supporting theory in this study to see the effect of Human Capital and Physical Capital on regional Financial Conditions. The key to the RBT approach is a strategy of understanding the relation between valuable resources, organisation

capabilities, competitive advantage, and profitability. In the end, all those resources should particularly provide supports for maintaining the competitive advantage over time.

The theory firstly introduced by Wernerfelt (1984) in his work entitled "*A Resource-based View of the Firm*". However, most of the researches referred to Barney's (1991) seminal work. The firm resources explained about how to help the company in improving the efficiency and effectiveness of operations. Furthermore, the competitive advantage can be understood by instilling an understanding of the company consists of heterogeneous and immovable elements. The steps in maximizing the competitive advantage of the company should fit into the four criteria, namely *valuable, awareness, inimitability and non-substitutability*.

According to RBT, the resources can be generally defined by including the assets, organizational processes, organizational attributes, information, or knowledge controlled by the organizations which can be used to compile and imply the strategies. Regardless the number of resources, the RBT categorizes the resources into three major types;

- a. Physical Capital (e.g. technology, manufacturing, and equipment)
- b. Human Capital (e.g. training, experience, insight)
- c. Organizational capital resources (e.g. formal structural)

Using the framework of the RBT, both Human and Physical Capital can maintain the quality of financial condition in an organisation, this includes public organisation such as provincial governments. Human Capital would provide the organisation with desired human resources which directly influence the quality of financial condition. Financial condition needs skillful personnel and experts to secure the accountability of the reporting system, for example. The existence of these expected workforces will sustain the quality of financial condition. The same case applies for the Physical Capital, organisation with abundant fruitful tools, devices, and equipment will be more likely to exert those tools to support firm achievement as well as providing support for financial condition.

The concept of RBT, in this case, also asserts that Human and Physical Capital are able to create an organization's competitive advantage so as to generate the incremental values for the organization. The value referred to the better performance in an organization including financial performance. Throughout the application of adequate Human Capital and supportive Physical Capital, provincial offices can provide more sufficient and complete information towards a better financial conditions (Ghozali and Chariri, 2007).

The supports from the two resources may not always provide desired effect on financial condition due to some conditions. For instance, previous studies have documented that organisational culture (Yesil and Kaya, 2013) and gender (Campbell and Mínguez-Vera, 2008) determined financial performance. Certain cultures may hinder the implementation of supportive human and physical capital. Likewise, gender-related injustice also impede proper human capital management. It appears that there are some degree of control which may potentially influence the effect of some resources on organisation's financial achievement. It is plausible to propose that the effect of the two key resources on financial condition is presumably moderated by the level of control.

Human and Physical Capital depend on the degree of control applied by organisational management. Management Control becomes much more important in ensuring that the human and physical resources are in place to support financial condition. Anthony and Govindarajan (2005) stated that "Management control is a process by which managers influence other organizational members to imply the organizational strategies". It is also a process of detecting and correcting errors for accidental or intentional work. Since its focus is on humans and implementing plans, management control requires strong psychological considerations. Activities such as communication, advising, encouraging and criticizing are important parts of this process.

Management control utilizes task control to ensure the kind of effective and efficient work by considering three important areas namely budgeting, economic value added, and balance scorecard (Otley, 1999). Efficient describes how many inputs are needed to produce a unit of output while effectiveness is defined as the ability of a unit to achieve the desired goals. The most efficient organizational unit is the one that can produce a number of outputs with the use of minimal inputs or produce the most output with the available inputs.

Control Theory of Strategic Human Resource Management (Snell, 1992) proposed that as an organisation expects certain level of performance, it must implement high degree of control over human resource management particularly when the goals and incentives are less clear. This theory also suggests that control depends on the degree of standard exhibited by organisations. As goals and incentives are less known and the cause-effect knowledge of management seems blur, high control is highly needed. Organisations may suffer from underachievement performance or serious issues related to organizational attainment.

The same case also applies for the financial condition. Using this Control theory perspective, public sector financial condition in the regional level potentially requires some degree of control in managing Human Capital and Physical Capital. The control should start from input, behavioural, and finally outputs. Human Capital management could support financial condition when the input (e.g. recruitment and selection) is practiced with systematic control. Behavioural control is related to personnel's behaviours which also require control to direct personnel towards targeted goals. Output control means organisation, stakeholders, and employees should have a crystalized standard of desired output and this standard is deemed to guide human capital management. Thus, the higher control implemented by the organisations, the more positive the effect of Human Capital on Financial Condition.

Physical capital also demands certain control in order to bring positive impact on financial condition. As proposed by the Control theory (Snell, 1992), clear and crystalized standard is important in developing control. Thus, certain degree of control is essential to ensure that the physical resources is utilized to supporting organisation goals. According to the theory, input, behavioural, and output control are three elements of control system. Physical Capital should also be controlled using this concept. Organisations with high degree of physical resource control would carefully consider physical input, control personnel behavior in using physical assets or resources, and physical utility output would be evaluated with caution. By implementing this system the positive effect of Physical Capital on Financial Condition will be considerably improved.

Latham and Locke (1979) also have strengthened the argument that high degree of control may cause the financial resources (i.e. human and physical capital) are even impactful. The goal-setting theory (Latham and Locke, 1979; Locke et al., 1981; Tosi et al., 1991) postulates that clear and specific goals are proven to be more effective than “do your best” goals. The goals impact organisation as the degree of clarity is high and this also apply for financial condition. Organisation could perform a better financial condition as the control over Human and Physical Capital are more standardized and crystalized. Similarly, Snell (1992) found that clear standard played important role in developing a better control system.

Given the important role of control, this study proposes a management control system to control how the strategy in the company runs according to plans and objectives. According to Purnamasari (2009) which stated that to encourage companies to be able to compete in increasingly fierce global competition, the management control is an absolute requirement that must be conducted by the professional managers. It is a process and structure which systematically arranged by management in controlling activities so that the goals and objectives set by the company can be achieved. Therefore, Management Control System will moderate the effect of Human and Physical Capital on Financial Condition.

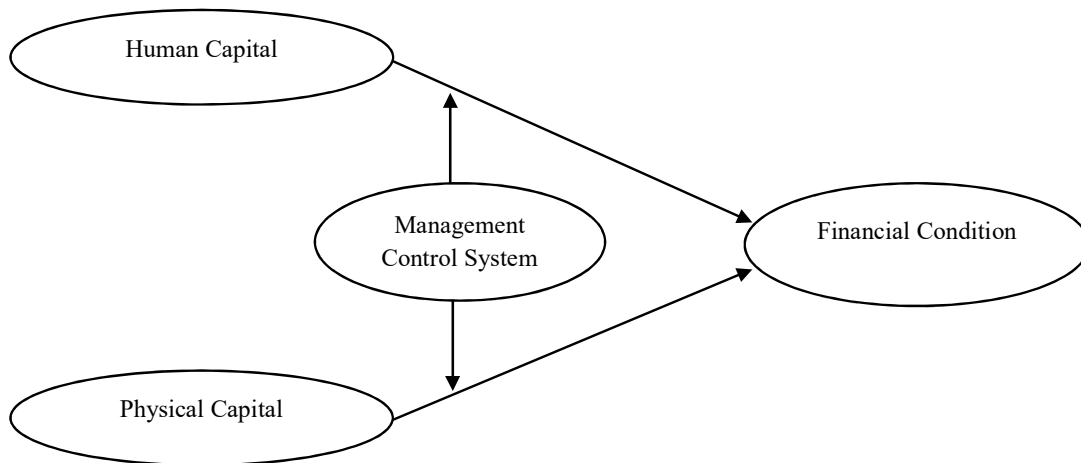


Figure 1. Theoretical Framework

***Hypotheses***

Based on this framework, a conceptual framework is developed for this research as follows:

H1: Human Capital has a positive effect on the Regional Financial Condition.

H2: Physical Capital has a positive effect on the Financial Conditions.

H3: Management Control System moderates the relation between Human Capital and Financial Conditions

**METHOD**

### ***Participants***

Participants were employees of the Regional Financial and Asset Management Agency who were the Financial Report Compilation team in the Golden Triangle area of South Sulawesi. The South Sulawesi Golden Triangle region was actually formed from a path connecting three regencies and big cities (Makassar, Gowa and Maros). Participants worked as Secretary, Budgetary, Treasury, Accounting and Information Technology and Regional Assets. This study took 5 people in each field which chosen randomly so that 25 samples per region could be obtained, and amount of 75 samples were obtained from three gold triangle regions. The number of female participants were 53% and male 47% with most participants had bachelor degree (81%).

### ***Measures***

This study used scale which were developed by the researchers in accordance with the theory of each variable. There are four measuring instruments in this study. The following table describes the construction of the measure:

Table 1. *Operational Variable*

Variable	Dimension	Indicator
<i>Human Capital</i> (Mignonedan O'Neil, 2005)		Special Competence Work Experience Skill
<i>Physical Capital</i> (Baldi, 2013)		Availability of Natural Resources and the Environment Government Investation Facilities and Infrastructure (Computer and Internet Networks)
Management Control System (Prabawati, 2010)		Strategic Planning Implementation and Measurement Evaluation
Financial Condition (Dinapoli, 2011)	Environment	Community needs Population Property Value Inflation Individual income Budgeting
	Organization	Budget Cost Timeliness and accuracy of financial transactions Quality and timeliness of financial reporting
	Financial	Limitation of Debt Potential Taxes Legality of Expenditures

The measures were developed in Indonesian using a 5-point Likert scale (1= Strongly Disagree to 5= Strongly Agree). The results showed that the data had four independent

constructs confirming the proposed theoretical model. Outer loading value indicated that the convergent validity of the data had coefficients above 0.50 for each item and the t-value for each item above 1.96. In addition, the value of Average Variance Extracted (AVE) in each construct variable was greater than 0.50. Based on the results of the analysis, all constructs fit into the convergent validity criteria. Those can be seen in the following table:

Table 2. *Average Variance Extracted (AVE)*

Variabel	AVE
Human Capital	0.617
Physical Capital	0.600
Management Control System	0.534
Financial Condition	0.702

Source: Primary data

The reliability test aims to see the composite reliability of each variable construct and also showed the appropriate value. The results suggested that the constructs had composite reliability coefficients above 0.70. So, it can be concluded that the construct had acceptable reliability.

Table 3. *Composite Reliability*

Variable	Composite Reliability
Human Capital	0.826
Physical Capital	0.818
Management Control System	0.931
Financial Condition	0.976

Source: Primary data

### ***Procedure***

The data were collected by using a questionnaire which were developed in Indonesian. Data collection was conducted using a three-wave data collection technique to avoid common method bias. In the first phase, researchers collected demographic, human capital and physical capital data. After a week, researchers then collected data for the Management Control System and the following week the Financial Condition data. Participants were asked to commit to filling out the questionnaire from the beginning to the end of the data collection which lasted for one month. All participants (75, 100%) fully participated in the study from the beginning to the end of the data collection.

## **RESULTS AND DISCUSSION**

### ***Results***

This study conducted several stages in the data analysis. First, the data were analyzed descriptively. Secondly, the relation between the variables were tested with Product Moment correlation. Lastly, the Hierarchical Moderated Regressions test was conducted.

Table 4. *Descriptive Statistics and Bivariate Correlations*

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
Human Capital	11.43	1.21						
Physical Capital	11.79	1.23	.52**					
MCS	12.12	1.15	.45**	.54**				
FC(Environment)	22.90	2.52	.53**	.56**	.73**			
FC(Institution)	12.17	1.22	.30**	.34**	.62**	.78**		
FC(Financial)	12.26	1.35	.46**	.46**	.67**	.72**	.64**	
FC Total	47.33	4.63	.50**	.53**	.76**	.86**	.87**	.85**

Note: *N*= 75, *M*= Mean, *SD*= Standard Deviation, MCS= Management Control System, FC= Financial Condition, \*\**p*<.01

Table 4 above showed the average values and standard deviations for each variable in the study. In addition, the relation between variables was presented in the form of product moment correlation coefficient. Based on the analysis of that relation, it was generally concluded that all variables in the study were positively and significantly correlated. The level of relation between these variables ranged from  $r = .34$  ( $p < .01$ ) to  $r = .86$  ( $p < .01$ ). The Human Capital had a fairly strong correlation with the Financial Condition ( $r = .50$ ,  $p < .01$ ) and so did the Physical Capital ( $r = .53$ ,  $p < .01$ ). The relation between the Management Control System and the Financial Condition was even stronger with the correlation coefficient which reaching  $r = .76$  ( $p < .01$ ). The results indicated that the two independent variables (i.e. Human Capital and Physical Capital) and Management Control System as moderator variables had a strong positive relation with Financial Condition.

After knowing the relation between variables, then the Hierarchical Moderated Regressions analysis was performed. The following were the results of the analysis:

Table 5. *Moderated Regressions with Financial Condition as Dependent Variable*

Model	<i>R</i> <sup>2</sup>	<i>Adj. R</i> <sup>2</sup>	$\Delta R^2$	$\Delta F$	$\beta$
1 Human Capital	.25***	.24	-	24.81	.50***
2 Human Capital Physical Capital	.35**	.33	.10**	10.86	.31** .37**
3 Human Capital Physical Capital HC*MCS	.36**	.34	.01	1.47	.32** .37** -.12
4 Human Capital Physical Capital HC*MCS PC*MCS	.43**	.40	.06**	7.98	.33** .33** -.33** .34**

Note: *N*= 75,  $\Delta$ = change,  $\beta$ = Standardized Beta Weight, HC= Human Capital, PC= Physical Capital, \*\*\**p*< .001, \*\**p*< .01

Hierarchical Regression Analysis with moderated regression was performed. This analysis technique allowed researchers to capture the incremental contribution of each variable which entered in the model. The first model, with Human Capital as the only predictor, showed a significant impact on the Financial Condition ( $Adj. R^2 = .25, p < .001$ ). In the second model, Physical Capital entered and contributed a positive and significant *added value* to the Financial Condition prediction model ( $\Delta R^2 = .10, p < .01$ ). In model 3, the interaction between Human Capital and Management Control System did not significantly increase the predicted value of the Financial Condition ( $\Delta R^2 = .01, p > .05$ ). Model 4 was the regression model that gave the highest contribution to the variance of the Financial Condition in the presence of the additional interaction variables of Physical Capital and Management Control System ( $\Delta R^2 = .06, p < .01$ ).

The analysis showed that the impact of Human Capital on Financial Condition was proven to be positive and significant across all regression models. When there were no other variables in the model, the impact of Human Capital on Financial Conditions tended to be strong ( $Adj. R^2 = .24, \beta = .50, p < .001$ ). The impact of Human Capital on Financial Conditions remained positive and significant across all the regression models, including in model 4 ( $Adj. R^2 = .40, \beta = .33, p < .001$ ). Based on these results, the H1 was accepted which meant the Human Capital had a positive effect on the Financial Condition.

The presence of Physical Capital to predict Financial Condition also had a positive impact on all regression models. In model 4, Physical Capital had the same effect as Human Capital ( $Adj. R^2 = .40, \beta = .33, p < .001$ ). This perceived that H2 was accepted, which meant that Physical Capital affected the Financial Condition.

In model 4, the interaction between Human Capital and Management Control System contributed negatively to Financial Condition ( $R^2 = .10, p < .01$ ). It meant that the impact of Human Capital on Financial Conditions depended on the high or low Management Control System ( $\beta = -.33, p < .01$ ). The higher the Management Control System then the lower the impact of Human Capital on Financial Conditions, and vice versa. This finding supported the research hypothesis (H3) which stated that the Management Control System moderated the relation of Human Capital to Financial Conditions.

The interaction between Physical Capital and Management Control System also showed a significant impact on the Financial Condition ( $\beta = .34, p < .001$ ). The impact of these interactions tended to be positive which meant that Physical Capital would increasingly have an impact on the Financial Condition when the Management Control System is high, conversely if a low Management Control System could reduce the impact of Physical Capital on the Financial Condition. These results were in accordance with the previously proposed H4.

The theoretical model which carried by the researcher was in accordance with empirical data which found with the suitability of the regression model up to  $R^2 = .43 (p < .01)$  which meant that the regression model could predict 43% of the variance of the Financial Condition.

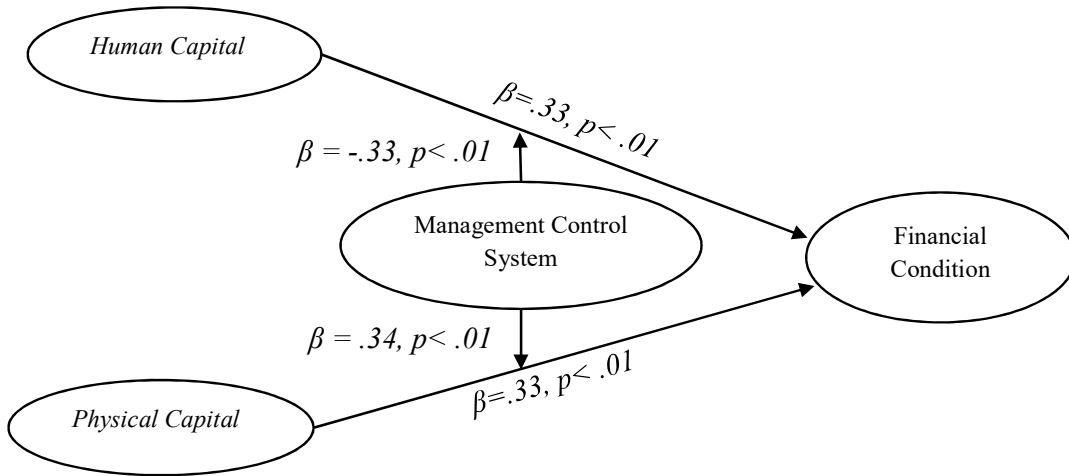


Figure 2. Empirical model and coefficients

Figure 3 below illustrates the interaction between Human Capital and Management Control Systems in predicting Financial Conditions. The graph explained that the value of the prediction model was higher when the Management Control System was at a low level ( $R^2 = .156$ ), compared to when it was at a high level ( $R^2 = .131$ ). So that the existence of a high Management Control System could reduce the impact of Human Capital on Financial Conditions.

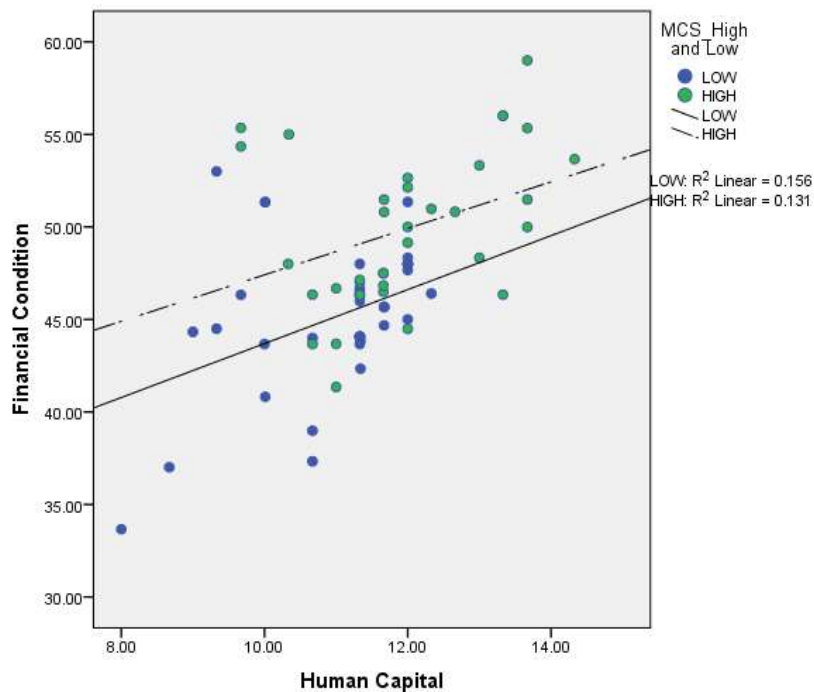


Figure 3. Interaction between Human Capital and Management Control System

The interaction between Physical Capital and Management Control System can be seen in Figure 4. Unlike the previous interactions, the interaction in figure 4 showed that the impact of

Physical Capital on Financial Conditions was stronger when the Management Control System was also at a high level ( $R^2 = 0.217$ ), compared when dealing at low levels ( $R^2 = 0.071$ ). A high Management Control System could support the positive impact of Physical Capital on Financial Conditions. The low Management Control System could result in the low impact of Physical Capital on Financial Conditions.

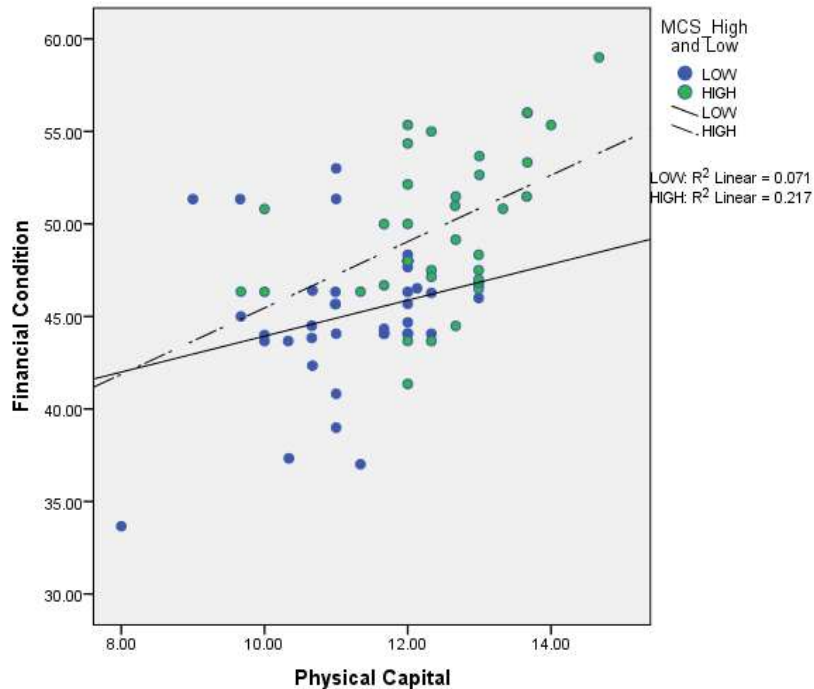


Figure 4. Interaction between Physical Capital and Management Control System

## DISCUSSION

### *The Effect of Human Capital on Financial Conditions*

The analysis showed that Human Capital had positive influence on Financial Conditions. Based on the analysis, the higher Human Capital in the terms of special competencies, work experience and skills, the more likely financial condition leverages in Makassar, Gowa and Maros. This suggests that Human Capital affects environmental, institutional, and financial conditions of these three areas. In this study, a successful financial condition referred to environment, institution and finances dimensions in three key areas of South Sulawesi (i.e. Makassar, Gowa and Maros). Firstly, within the environmental dimension there were community needs, populations, property values, inflation, individual income and budgeting, all these necessary to establish a stable financial condition. Secondly, human resources also contribute to institutional dimensions of financial performance. Human Capital aspects supports the organisation strategic in which there was availability of budget, timeliness and accuracy of financial transactions and the quality, and timeliness of financial reporting. Lastly, the workforce competence also provided supports for the financial dimension which included debt limits, tax potential and legality of expenditure. Successful financial dimension, in this regard, relied upon the workforce competence. Human capital serves a means to monitor debt limits and tax management, for example. So the increase or

decrease in Human Capital had an influence on the Financial Condition of the government in these regions. Similar research was also found by Zulkifli (2018), Ramli et al. (2014), Nimtrakoon (2015), Ervina et al. (2008), Is et al. (2014), which stated that Human Capital had a positive effect on Financial Conditions.

The RBT (Barney, 1991, 2001) has explained the importance of valuable and rare resources in fostering organisation competitive advantages. Human Capital also acted as a valuable resource for organizational success which also includes financial achievement within organisation. As the organisation maintains sufficient quality of Human Capital, the workforce will strive to facilitate sustainable financial performance. Thus, according to this study, the RBT successfully explained the role of Human Capital in predicting Financial Condition.

Special competence, work experience and skills became important points in improving Financial Conditions because with those could be an important part in improving innovation, strategies and objectives of the organization. Participants assumed that the development of human capital was also able to increase the ability of an area in improving the economy and maximizing its potential, but this study assumed that it is unable to affect the company's Financial Condition.

This research reinforced the notion that the role of Human Capital in a government needed to be considered because the better Human Capital was able to strengthen the achievement of the objectives of an area. The fulfillment of the needs of the residents of an area could be improved with the support of good Human Capital.

### ***The Effect of Physical Capital on Financial Conditions***

The results showed that Physical Capital had a positive effect on the Financial Conditions. The level of Physical Capital in terms of the availability of natural resources and the environment, government investment, facilities and infrastructure (e.g. computers, internet access) had a significant impact on the fulfilment of the environmental, institutional, and financial sectors in the government areas of Makassar, Gowa and Maros. Physical Capital contributed positive impact on leveraging the areas' Financial Condition which also included fostering environmental, institutional, and financial aspects.

As mentioned earlier, there are three distinct dimensions namely the environment, institutions and finances. These three aspects were applied to depict financial achievement of local government in South Sulawesi (i.e. Makassar, Gowa and Maros). In leveraging financial condition, the governments should scrutinize the community needs, populations, property values, inflation, individual income and budgeting. The second dimension was the institution in a sense that there was budget availability, timeliness and accuracy of financial transactions, and the quality and timeliness of financial reporting. The third dimension was finance which covered debt limits, tax potential and legality of expenditure.

The RBT has supported that Physical Capital (e.g. technology) has provided valuable resources for the governmental organisations in South Sulawesi, Indonesia. The theory and previous findings have been supported by this empirical study. Physical Capital had significant positive influence on the Financial Condition of the government in these three regions; Makassar, Gowa and Maros. Barney (2001) proposed that competitive advantages of an organisation can be achieved by utilizing existing valuable and rare resources in organisation. Consistently, in the case

of local government organisations in Indonesia, it appeared that Physical Capital added significant amount of incremental variances to the development of Financial Condition. Physical assets, technologies, devices and other facilities were viewed as the essential elements of successful Financial Conditions.

This study was also in line with research conducted by Zulkifli (2018), Nimtrakoon (2015), Ervina et al. (2008), Is et al. (2014). However, the effect could be indirect as other variables also might also influence the relationship. For example, Nirvana et al. (2014) discovered that Cultural Capital moderated the Physical Capital - Financial Conditions relationship. Therefore, this study also considered testing the effect of Management Control System in moderating the effect.

Limitations of Physical Capital were often became a problem of a local government regardless the quality of Human Capital. Generally, regions that had outstanding human capital would be more developed if juxtaposed with the availability of natural resources and the environment, adequate government investment, facilities and infrastructure (e.g. computers). It seems in this study, the participants considered that Physical Capital in a form of technologies, facilities and infrastructures provide significant supports for Financial Condition.

### ***The Moderation Effect of Management Control System on the Relation of Human Capital and Financial Condition***

Apart for the direct effect of Human Capital on Financial Condition, this study also found that Management Control System moderated the effect of Human Capital on Financial Condition. This research was supported by the Control Theory (Snell, 1992) as the theory stated that managing human resources must be supported with input, behavioural, and output control. In addition, the Control Theory and the Goal Setting (Latham and Locke, 1979) postulated that clear and crystalized standard potentially emphasize the effect of resources. In addition, the goal setting principles have stressed enough on the importance of specific and clear goals. Say it differently, the theoretical background has assumed that a company with supportive human resources but zero goals and rules would experience constraints to rise the Financial Condition.

This study discovered an interesting findings related to the moderation effect of the Management Control System. The presence of a lower degree of Management Control System could trigger improvement in local government organisation. In contrast, high degree of Management Control System would reduce the effect of Human Capital on Financial Condition. The theories have supported that Management Control System facilitated the Human Capital – Financial Condition relationship. The moderating effect seems to be more positive as the theories suggested that clear and standardized goal of Human Capital management could improve Financial Condition. However, this study showed opposing evidence as the moderating effect was found to be negative. This indicated that the existence of Management Control System could weaken the role of Human Capital on Financial Condition.

In the local government areas, Human Capital significantly determined the fluctuation of Financial Condition. However, as the Management Control System implemented with considerably high degree of input, behavioural, and output control, Human Capital would be less influential. The Management Control System improves the Human Capital management by standardizing control over the input quality, specifying work behaviour, and directing control to

attain desired output. The government officials could have perceived Human Capital as an insignificant resource as the management of the human resources was highly controlled. Simply, the local governments could discarded the importance of Human Capital for Financial Condition as they perceived high Management Control System.

The results of this study were in line with the research conducted by Chandra (2017), Ong et al. (2016), Rachma (2014) where they all found that the Management Control System had a significant influence on Human Capital and Financial Conditions. However, despite the effect, scholars and government officials should consider how the Human Capital and Management Control System interact to predict Financial Condition. In terms of predicting the local government Financial Conditions, as the degree of Management Control System increases the Human Capital impact on Financial Condition declines. Thus, Organisations that have a poor Management Control System may require high quality of Human Capital.

### ***The Moderation Effect of Management Control System on the Relation of Physical Capital and Financial Condition***

The results of this study also indicated that the Management Control System was able to moderate the effect of Physical Capital on Financial Conditions. The relation between Physical Capital and Financial Conditions is increasing as the Management Control System included in the prediction model. As predicted previously using the Control Theory by Snell (1992), high degree of control over input, behaviour, and output also improve the quality of Physical Capital. In this respect, Physical Capital could be more influential as the Management Control System ensure its quality by controlling input of physical resources, controlling behaviours in utilizing the resources, and directing the outputs of using the resources. As the Management Control System increases, it improves the effect of Physical Capital on Financial Condition.

Unlike the former moderating effect, Management Control System and Physical Capital went hand-in-hand in predicting Financial Condition. It indicated that the effect of Physical Resources on Financial Performance depended on the degree of control in organisation. Organisations with abundant of Physical Resources may not always provide high performing Financial Condition unless they implement high state of Management Control System. This shades the light on the importance of Management Control System in supporting the role of Physical Capital. Hypothetically, if the organisations tend to have less Physical Resources, managing the resources using the Management Control System principles will accentuate the effect of the resources on the organisations' Financial Condition.

The results were in line with some previous investigations conducted by Chandra (2017), Ong et al. (2016), and Rachma (2014). In those studies, Management Control System was one of predictors of Financial Performance in organisations. The effect of Management Control System is important as it serves as control over resources quality. Anthony and Govindarajan (2005) stated that Management Control System was also a process for detecting and correcting errors at work. The focus is on human behaviours and the implementation of plans. The focus on behavioural control also requires a strong psychological aspects.

In the local government organisation, the three golden areas of South Sulawesi may have relied on the level of Management Control System to attaining expected level of Financial

Condition. In this regard, the government official should strive to optimize the control over the physical resources. The control system should manage the selection of equipment, human behaviours related to the application of the equipment, and it also should monitor the effect of certain technologies or devices on outputs. Physical Capital positively predict the local government Financial Condition as far as the physical resources controlled with systematic procedure starting from input to output.

### ***Implications***

This research empirically examined the influence of moderating effect of Management Control Systems on the two local government financial condition antecedents; Human and Physical Capital. The results provided supports that perceived Management Control System significantly determined the effect of Human Capital and Physical Capital on Financial Condition. However, this moderator behaved differently towards Human and Physical Capital. Management Control System tended to alter the low quality of Human Capital while at the same time strengthen the Physical Capital – Financial Condition Relationship.

In a case where the local governments implement high Management Control System, the Physical Capital will be more likely to foster Financial Condition. Unfortunately, this condition will also reduce the Human Capital effect on Financial Condition. Albeit the organisations have exhibited sufficient workforce competence, it will have less impact on the Financial Condition as the Control System is highly managed. Presumably, outstanding Human Capital can tolerate a poor Management Control System and still positively impacts Financial Condition. Control System is important for directing the effect of resources on Financial Condition. However, the local government officials, in this case, should be aware that increasing control over Human Capital can reduce the effect of human resources on Financial Condition. Human Capital in the local government areas may not have less impact on financial performance as the organisations implement high control system.

### ***Limitations and Future Research Directions***

This study employed a set of questionnaire as valid and reliable measures of variables being studied. The initial attempt was to collect objective data. However, the existing objective data were not adequately standardized across different organisations. The data were also strictly prohibited for non-official parties. Likewise, researchers cannot find alternative objective data that definitely measured the level of achievement of the whole existing variables, other than the opinions of employees who work in the organization. This study, then, employed Subject Matter Experts (SMEs) perception towards each variable in the study and this procedure was supported by the authorities. Therefore, future studies can repeat this method using objective data sources from government officials by establishing mutual collaborations.

Furthermore, although this research succeeded in involving representatives from all agencies with varying levels of position, the number of participants involved was still small compared to some previous studies. By increasing the number of participants and involving more governmental organisations, the future studies would provide more information regarding the effect of control system in organisation.

## **CONCLUSIONS**

This study has two folds. Firstly, it contributed a new information related to the effect of two key resources (i.e. Human and Physical Capital) on financial performance in governmental organisations. Secondly, this study broaden our understanding towards the unique role of Management Control System in the local government organisations in South Sulawesi, Indonesia. The first part of the findings was consistent with the RBT as both Human and Physical Capital significantly predicted Financial Condition. However, the second part of the findings was mixed as Management Control System negatively moderated the effect of Human Capital while at the same time also positively moderated the effect of Physical Capital on Financial Condition. This study highlighted the importance of improving the standard of control system in managing the local government organisations. Although it potentially reduces the effect of Human Capital, high degree of control will help organisations to maintain desired Financial Conditions.

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KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN  
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APPROVAL NOTICE

No. 2017/UNH.4/KP.06.10/2020

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Project Title	:	Human Capital and Physical Capital in Regional Financial Condition
Project ID	:	UH.EB.005.01.03.20
Project start date	:	10 January 2020
Project end date	:	10 January 2021

The above proposed project has been **approved** based on the information given in the application and its attachments. Please inform the *Social and Behavioral Research Ethics division at Universitas Hasanuddin*, if the above research project is discontinued before the expected date of completion. In addition, you are required to report anything which might warrant review of ethical approval of the protocol, this might include:

- serious or unexpected adverse impacts on participants
- Amendments in the protocol
- Changes to the research team

Please reach the office of Research Ethics at Fakultas Ekonomi dan Bisnis, Universitas Hasanuddin if this project requires amendments or extension. Your report is due on the completion of the project.

Makassar, 05 January 2020

Dekan,



Prof. Dr. Abd. Rahman Kadir, SE., M.Si., CIPM  
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## INFORMED CONSENT

Title of Research: Human Capital and Physical Capital in Regional Financial Condition

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1. Introduction and Purpose of the Study  
*This study aims to investigate employees' perception about their daily work routine which includes their idea about their performance and experience in the workplace.*
2. Description of the Research  
*In this study you will be asked to complete questionnaires. The questionnaire will come in three times in every two weeks. Each questionnaire will take up to 15 minutes to complete.*
3. Participation  
*We estimate there will be 100 employees participate in this study. They will come from the Regional Financial and Asset Management Agency team in the Golden Triangle area of South Sulawesi. As a participant, you will receive a survey booklet three times every two weeks. Your decision to participate in this study is complete voluntary. If you decide to not participate in this study, it will not affect the care, services, or benefits to which you are entitled.*
4. Potential Risks and Discomforts  
*You may experience some discomforts in filling the questionnaire. If you do not feel comfortable enough to answer the questions, you can stop at any point. You can withdraw from the study at any point and your decision will not affect your job, the care, service, or benefits to which you are entitled. This study and your participation will not impact your job or your performance report.*
5. Potential Benefits  
*People who participate in this study may better understand the link between human resources and financial condition.*



## THE EFFECT OF HUMAN CAPITAL AND PHYSICAL CAPITAL ON REGIONAL FINANCIAL CONDITION: THE MODERATING EFFECT OF MANAGEMENT CONTROL SYSTEM

--Manuscript Draft--

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<b>Abstract:</b>	<p>This study aims to examine the effect of Human Capital and Physical Capital on Regional Financial Condition with a Management Control System as moderator. Participants were employees of the Regional Financial and Asset Management Directorates which were located in three major cities/districts in the province of South Sulawesi, Indonesia. The 75 randomly selected participants involved in a three-wave data collection procedure. Four measures were developed (i.e. Human Capital, Physical Capital, Management Control System, and Financial Condition) which were found to be constructively valid and reliable for research purposes. The results showed that the Human Capital and Physical Capital directly influenced the Financial Conditions. The effect of Human and Physical Capital were moderated by the Management Control System. Management Control System negatively moderated the effect of Human Capital while at the same time also positively moderated the effect of Physical Capital on Financial Condition. This study collected participant's perceptions towards the study variables without any further investigation to the objective measures. Although, some scholars may find this as the lack of evidence against the actual financial conditions, acknowledging experts' perceptions should provide a better understanding on the experienced financial condition. Various studies have investigated some factors which may affect the Financial Conditions. However, this study proposed an examination of the role of Management Control System. In this case, a capital which is owned by the financial organizations cannot provide a direct impact on the Financial Conditions if there is no role of the Management Control System.</p>
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<b>Opposed Reviewers:</b>	

# THE EFFECT OF HUMAN CAPITAL AND PHYSICAL CAPITAL ON REGIONAL FINANCIAL CONDITION: THE MODERATING EFFECT OF MANAGEMENT CONTROL SYSTEM

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## Abstract

This study aims to examine the effect of Human Capital and Physical Capital on Regional Financial Condition with a Management Control System as moderator. Participants were employees of the Regional Financial and Asset Management Directorates which were located in three major cities/districts in the province of South Sulawesi, Indonesia. The 75 randomly selected participants involved in a three-wave data collection procedure. Four measures were developed (i.e. Human Capital, Physical Capital, Management Control System, and Financial Condition) which were found to be constructively valid and reliable for research purposes. The results showed that the Human Capital and Physical Capital directly influenced the Financial Conditions. The effect of Human and Physical Capital were moderated by the Management Control System. Management Control System negatively moderated the effect of Human Capital while at the same time also positively moderated the effect of Physical Capital on Financial Condition. This study collected participant's perceptions towards the study variables without any further investigation to the objective measures. Although, some scholars may find this as the lack of evidence against the actual financial conditions, acknowledging experts' perceptions should provide a better understanding on the experienced financial condition. Various studies have investigated some factors which may affect the Financial Conditions. However, this study proposed an examination of the role of Management Control System. In this case, a capital which is owned by the financial organizations cannot provide a direct impact on the Financial Conditions if there is no role of the Management Control System.

**Keywords:** human capital, physical capital, management control system, financial condition, and Indonesia

## INTRODUCTION

Financial Condition is determined by the ability of an area to fulfill an obligation for prospering or serving a community. In this regards, there are three core dimensions to evaluate the financial conditions they are environmental, institutional and financial dimensions (Dinapoli, 2011). These three dimensions will be interconnected to produce a sufficient Financial Condition.

1 By fulfilling all these dimensions, government will be able to bring more stable financial  
2 conditions.  
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4 Firstly, the environmental dimension is the assessment of Financial Conditions which  
5 assessed based on how a government supports or impedes regulations, especially on bringing  
6 innovations to the community. Secondly, the institutional dimension is a management practice and  
7 legislative policy which guides the fiscal decision making. Its function is often as a response to the  
8 environmental or political factors (Dinapoli, 2011). Lastly, financial dimension is most related to  
9 financial performance. This particular dimension includes potential tax or incomes in a particular  
10 region and a debt limit and a legality of expenditure from a region. For some countries, it also  
11 consists of fiscal decentralization management in which each region will obtain a budget for the  
12 funds to be managed.  
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16 One of the most important questions to this issue is, what are variables may potentially  
17 predict financial conditions. Considering the important roles of resources, the Resource Based  
18 Theory (Barney, 1991) supports the notion that Human Capital and Physical Capital provides  
19 significant resources for maintaining sufficient financial conditions. Human capital becomes  
20 considerably important because it is a source of innovation and strategy renewal. Human Capital  
21 is related to any knowledge, skills, abilities and attitudes owned by personnel in organisations  
22 which are highly supportive for organizational success (Perrotta, 2018). Further, it can be fostered  
23 from an applied research, management objective, reengineering process and improvement or  
24 development of workforce skills. Furthermore, human capital creates incremental values to  
25 organisations on a daily basis, via motivation, commitment, competence and effectiveness of the  
26 teamwork. However, each organization offers distinctive approaches in managing human capital  
27 and it also means different values (Lepak and Snell, 2002). Thus, human capital provides unique  
28 contributions to financial condition based on unique approaches given by organisations.  
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34 In addition to Human Capital, Physical Capital also adds incremental variance to the  
35 successful financial conditions. The notion of Physical Capital includes natural resources and other  
36 technological devices (Galor and Moav, 2004). The existence of Physical Capital supports the  
37 improvement of the Financial Condition of an area. To illustrate, the development of the basic  
38 physical conditions such as sanitation, clean water, and electricity in an area will also help to foster  
39 the services and welfare for the community which may later improve Financial Conditions.  
40 Physical Capital is also useful for creating additional values to producing desired input. Thus, it is  
41 reasonable to conclude that both human and physical resources act together to influence a region  
42 financial condition.  
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47 The direct effect of these two capitals (i.e. human and physical) may have been moderated  
48 by the level of control performed by organisations. In Indonesia, some empirical investigations  
49 conducted by Chandra (2017), and Sari and Fitriani (2009) found that the management control  
50 system was able to improve Financial Conditions. In these two studies, Human Capital and  
51 Physical Capital directly impacted financial performance where the organisations had sufficient  
52 control over the resources. As a result, the organisations performed better and showed expected  
53 financial conditions.  
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57 The concept of Control theory in strategic human resource management from Snell (1992)  
58 has provided a clear arguments on how high control facilitates positive effect of human capital and  
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1 physical capital on desired financial conditions. According to the theory, Human Capital and  
2 Physical Capital will leverage financial performance only if an organisation implement certain  
3 degree of control over human capital inputs, behavioural controls, and desired outputs. This further  
4 suggests that possessing a management control system favours the effect of Human and Physical  
5 Capital on Financial Conditions.  
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8 Accordingly, management control system becomes a moderation in creating good  
9 Financial Condition for one particular region. In a developing country like Indonesia, the  
10 management control system is one of the strongest foundations of good governance (Purnomo,  
11 and Budiawan, 2014). The internal control system includes various management tools that aim to  
12 achieve a broad range of objectives. In addition, Riawan (2016) stated that the management control  
13 system is able to improve the Financial Condition of an organisation. Meanwhile, Masyur (2016)  
14 postulated that local governments encounter difficulties in implementing a good control system  
15 strategy because the absence of synergy between Human Capital and the control strategy.  
16 Subsequently, this made the public services became less efficient. Control becomes a crucial  
17 element to ensure that financial condition is achieved as expected.  
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22 Management control system consists of management control structures and processes  
23 (Halim et al., 2012). The control structure is centered on a variety of responsibility centers, while  
24 the management control process includes budget preparation, implementation and measurement  
25 as well as reporting and analysis. In the process of the management control, the decisions are made  
26 based on the procedures and other schedules which carried out repeatedly year after year. Those  
27 procedures usually start from programming. The program is translated into the form of a budget,  
28 then the company operates based on a predetermined budget, procedure and policy. The final  
29 results are then compared with the budget, after being evaluated and improved if necessary. Since  
30 the procedure is carried out repeatedly every year, then management requires a management  
31 control system to improve its performance so that the company's goals can be achieved.  
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36 By applying the Resource Based theory and Control theory in Strategic Management, one  
37 should be able to capture that the presence of high management control will leverage the effect of  
38 human and physical capital on financial condition. However, some contextual conditions may also  
39 influence this argument. For instance, Indonesia as a developing countries implements a  
40 decentralisation policies which also include financial autonomy for its provinces. Consequently,  
41 some experts and practitioners have questioned about some antecedents related to regional  
42 financial performance.  
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46 Law No. 23 of 2014 states the implementation of regional government directed to  
47 accelerate the realization of community welfare through improving services, empowerment, and  
48 community participation, as well as enhancing regional competitiveness by taking it into an  
49 account of the principles of democracy, equality, justice, and uniqueness of the area in the system  
50 of the Unitary State of the Republic of Indonesia. Regional autonomy is a part of decentralization.  
51 It constructs each region to have the right and obligation for regulating their own area but with the  
52 control of the central government and in accordance with the law. A fiscal decentralization is  
53 implemented in order to encourage several levels of government which are able to control each  
54 region. The local governments in each region will accommodate the aspirations of a community  
55 and be obliged to prosper the community in terms of services. The success of a regional autonomy  
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1 is integrated with the ability of a region to manage the funds that have been budgeted to its area.  
2 In addition, the local governments should also be able to utilize the resources that are already  
3 owned by the region. Therefore, the success of a regional autonomy significantly is related to the  
4 Financial Condition of the region.  
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7 Unfortunately, contrasting views emerged regarding the effect of Human Capital and  
8 Physical Capital on Financial Conditions in Indonesia. For instance, Nirwana and colleagues  
9 (2014) found that Human Capital and Physical Capital had non-significant influence on Financial  
10 Conditions. However, they found it emerged after intervening through the culture. While, Zulkifli  
11 et al. (2018) found contrasting findings where Human Capital and Physical Capital had a positive  
12 effect on Financial Performance. Another finding suggested that the differences were caused by  
13 the influence of Indonesia's national culture. The level of uncertainty was found to be higher in  
14 Indonesia than Australia which later reduce the effect of any resources on financial performance  
15 (Graham and Sathye, 2017).  
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18 Additionally, pressure from the central government has imposed some policies in  
19 managing budget in local government. Although provincial governments had adapted a new  
20 accounting system, the issue was the local officials found it difficult to maintain a well-controlled  
21 and structured system (Harun and Kamase, 2012). In a similar vein, Mir and Sutiyono (2013) have  
22 discovered that the demand, supply, and the quality of Indonesian's local accounting system lacked  
23 of parity which also means the financial system implemented less effective control. This, then,  
24 causes a subsequent effect on the local financial performance as an effective decision-making and  
25 efficient management would be difficult to implement. Thus, in this situation exhibiting an  
26 effective control in managing resources lead to better financial performance.  
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29 This investigation is necessary in order to further understand the antecedents of financial  
30 conditions and the role of effective management control. Local governments in Indonesia may  
31 have undergone less effective control over accounting system and failed to address the issue since  
32 their financial reports were in a category of acceptable without exceptions. Sulawesi Selatan, in  
33 this case, acted as the main gate of Eastern Indonesia where many important businesses happens.  
34 Despite the prestigious financial condition, this local government was imposed to implement  
35 certain regulation from the central government. Additionally, some resources may have been used  
36 to support the financial performance. However, more empirical information is necessary to explore  
37 whether those resources influence financial condition or not.  
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40 Then, the theory and empirical evidence led this study to exert management control system  
41 as its moderation variable on observing the influence of Human Capital and Physical Capital on  
42 the Financial Conditions of the area which was chosen in this study. A fiscal decentralization is a  
43 government policy to increase the ability of an area to manage its own region. The policy will  
44 make the distance between the government and the community will be tightened by the presence  
45 of government representatives in each region who can take their respective policies to maximize  
46 the services to the community, with the management of the economic resources in the region. The  
47 local governments faced difficulties in implementing effective control system strategy because  
48 they were unable to link the relationship between Human Capital and the control strategy. As the  
49 results, it caused the public services became less efficient.  
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1 Having considered the above discussions, the research objectives are formulated as  
2 follows;  
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- 4 1. To examine the effect of Human Capital on Regional Financial Conditions.
- 5 2. To examine the effect of Physical Capital on Regional Financial Conditions.
- 6 3. To examine the effect of Human Capital on Regional Financial Conditions which are  
7 moderated by the Management Control System.  
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## 10 **LITERATURE REVIEW AND HYPOTHESES**

11 The Public Sector Accounting Board (2007) defined the Financial Conditions as the health  
12 of government finances as indicated by their ability to fulfill the financial obligations and the  
13 service commitments to the public, creditors, employees and others, While according to Dinapoli  
14 (2011), the Financial Condition is the ability of the local governments to comply the expenditure  
15 budget by taking the source of local revenue, and continuously providing services to the  
16 community.  
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19 Financial factors in Nirvana et al. (2014) is a financial distribution which run by the  
20 financial system. The financial system seeks to ensure adequate financial judgment and cover up  
21 liquidity. The Indicators of financial factors according to Dinapoli (2011) are the debt limits, the  
22 tax potential and the legality of expenditure. Institutional factors according to Dinapoli (2011) are  
23 management practices and the existence of policies or regulations of local governments which  
24 guarantee the implementation of the healthy governance. Furthermore, the institutional indicators  
25 are the budget and financial variance, the timeliness and accuracy of financial transactions, and  
26 the quality and timeliness of financial reporting.  
27  
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29 In addition, Dinapoli (2011) stated that the Financial Conditions are determined by a  
30 combination of government environment, institutional and financial factors. For example when  
31 there is a decrease in population of a government, so there will be a reduction in the tax revenue  
32 (negative environmental factors), but the government can overcome this by reducing services.  
33 Increasing the tax rate, striving for the development of economic resources which ultimately  
34 determine the Financial Condition of the local governments.  
35  
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37 Financial condition in a regional level can be influenced by several factors such as CEO  
38 power (Daily and Johnson, 1997), environmental and operational management (Sueyoshi and  
39 Goto, 2010), and technical performance (Kristensen et al., 2008). These antecedents can be  
40 grouped into two type of resource namely human capital and physical capital. The former was  
41 workforce competences (e.g. knowledge and skills), while the latter is more related to technology,  
42 devices, and equipment used to perform tasks in organisations. The human and physical capital  
43 will be the most two precious antecedents of organisation's financial condition.  
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46 The notion of human and physical capital as key antecedents of financial condition has  
47 been supported by a theoretical perspective. A resource theory or commonly called Resource  
48 Based Theory (RBT) uses a resource-based approach in the analysis of competitive advantages  
49 (Barney, 1991, 2001). The theory is used as a supporting theory in this study to see the effect of  
50 Human Capital and Physical Capital on regional Financial Conditions. The key to the RBT  
51 approach is a strategy of understanding the relation between valuable resources, organisation  
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1 capabilities, competitive advantage, and profitability. In the end, all those resources should  
2 particularly provide supports for maintaining the competitive advantage over time.  
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4 The theory firstly introduced by Wernerfelt (1984) in his work entitled "*A Resource-based*  
5 *View of the Firm*". However, most of the researches referred to Barney's (1991) seminal work.  
6 The firm resources explained about how to help the company in improving the efficiency and  
7 effectiveness of operations. Furthermore, the competitive advantage can be understood by  
8 instilling an understanding of the company consists of heterogeneous and immovable elements.  
9 The steps in maximizing the competitive advantage of the company should fit into the four criteria,  
10 namely *valuable, awareness, inimitability and non-substitutability*.  
11

12 According to RBT, the resources can be generally defined by including the assets,  
13 organizational processes, organizational attributes, information, or knowledge controlled by the  
14 organizations which can be used to compile and imply the strategies. Regardless the number of  
15 resources, the RBT categorizes the resources into three major types;  
16

- 17 a. Physical Capital (e.g. technology, manufacturing, and equipment)
  - 18 b. Human Capital (e.g. training, experience, insight)
  - 19 c. Organizational capital resources (e.g. formal structural)
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25 Using the framework of the RBT, both Human and Physical Capital can maintain the  
26 quality of financial condition in an organisation, this includes public organisation such as  
27 provincial governments. Human Capital would provide the organisation with desired human  
28 resources which directly influence the quality of financial condition. Financial condition needs  
29 skillful personnel and experts to secure the accountability of the reporting system, for example.  
30 The existence of these expected workforces will sustain the quality of financial condition. The  
31 same case applies for the Physical Capital, organisation with abundant fruitful tools, devices, and  
32 equipment will be more likely to exert those tools to support firm achievement as well as providing  
33 support for financial condition.  
34

35 The concept of RBT, in this case, also asserts that Human and Physical Capital are able to  
36 create an organization's competitive advantage so as to generate the incremental values for the  
37 organization. The value referred to the better performance in an organization including financial  
38 performance. Throughout the application of adequate Human Capital and supportive Physical  
39 Capital, provincial offices can provide more sufficient and complete information towards a better  
40 financial conditions (Ghozali and Chariri, 2007).  
41

42 The supports from the two resources may not always provide desired effect on financial  
43 condition due to some conditions. For instance, previous studies have documented that  
44 organisational culture (Yesil and Kaya, 2013) and gender (Campbell and Mínguez-Vera, 2008)  
45 determined financial performance. Certain cultures may hinder the implementation of supportive  
46 human and physical capital. Likewise, gender-related injustice also impede proper human capital  
47 management. It appears that there are some degree of control which may potentially influence the  
48 effect of some resources on organisation's financial achievement. It is plausible to propose that the  
49 effect of the two key resources on financial condition is presumably moderated by the level of  
50 control.  
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1 Human and Physical Capital depend on the degree of control applied by organisational  
2 management. Management Control becomes much more important in ensuring that the human and  
3 physical resources are in place to support financial condition. Anthony and Govindarajan (2005)  
4 stated that "Management control is a process by which managers influence other organizational  
5 members to imply the organizational strategies". It is also a process of detecting and correcting  
6 errors for accidental or intentional work. Since its focus is on humans and implementing plans,  
7 management control requires strong psychological considerations. Activities such as  
8 communication, advising, encouraging and criticizing are important parts of this process.  
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12 Management control utilizes task control to ensure the kind of effective and efficient work  
13 by considering three important areas namely budgeting, economic value added, and balance  
14 scorecard (Otley, 1999). Efficient describes how many inputs are needed to produce a unit of  
15 output while effectiveness is defined as the ability of a unit to achieve the desired goals. The most  
16 efficient organizational unit is the one that can produce a number of outputs with the use of  
17 minimal inputs or produce the most output with the available inputs.  
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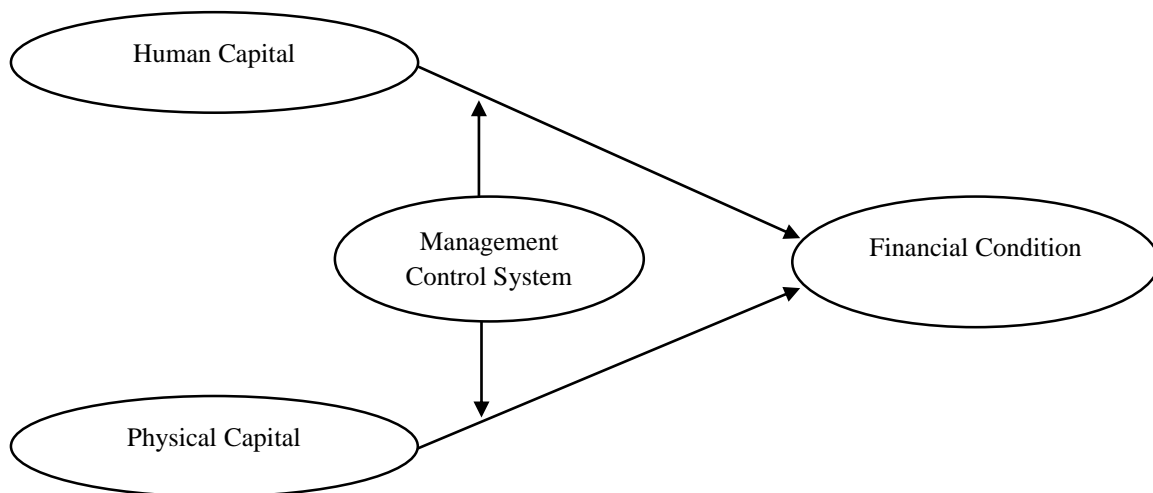
19 Control Theory of Strategic Human Resource Management (Snell, 1992) proposed that as  
20 an organisation expects certain level of performance, it must implement high degree of control  
21 over human resource management particularly when the goals and incentives are less clear. This  
22 theory also suggests that control depends on the degree of standard exhibited by organisations. As  
23 goals and incentives are less known and the cause-effect knowledge of management seems blur,  
24 high control is highly needed. Organisations may suffer from underachievement performance or  
25 serious issues related to organizational attainment.  
26

27 The same case also applies for the financial condition. Using this Control theory  
28 perspective, public sector financial condition in the regional level potentially requires some degree  
29 of control in managing Human Capital and Physical Capital. The control should start from input,  
30 behavioural, and finally outputs. Human Capital management could support financial condition  
31 when the input (e.g. recruitment and selection) is practiced with systematic control. Behavioural  
32 control is related to personnel's behaviours which also require control to direct personnel towards  
33 targeted goals. Output control means organisation, stakeholders, and employees should have a  
34 crystalized standard of desired output and this standard is deemed to guide human capital  
35 management. Thus, the higher control implemented by the organisations, the more positive the  
36 effect of Human Capital on Financial Condition.  
37

38 Physical capital also demands certain control in order to bring positive impact on financial  
39 condition. As proposed by the Control theory (Snell, 1992), clear and crystalized standard is  
40 important in developing control. Thus, certain degree of control is essential to ensure that the  
41 physical resources is utilized to supporting organisation goals. According to the theory, input,  
42 behavioural, and output control are three elements of control system. Physical Capital should also  
43 be controlled using this concept. Organisations with high degree of physical resource control  
44 would carefully consider physical input, control personnel behavior in using physical assets or  
45 resources, and physical utility output would be evaluated with caution. By implementing this  
46 system the positive effect of Physical Capital on Financial Condition will be considerably  
47 improved.  
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1 Latham and Locke (1979) also have strengthened the argument that high degree of control  
2 may cause the financial resources (i.e. human and physical capital) are even impactful. The goal-  
3 setting theory (Latham and Locke, 1979; Locke et al., 1981; Tosi et al., 1991) postulates that clear  
4 and specific goals are proven to be more effective than “do your best” goals. The goals impact  
5 organisation as the degree of clarity is high and this also apply for financial condition. Organisation  
6 could perform a better financial condition as the control over Human and Physical Capital are more  
7 standardized and crystalized. Similarly, Snell (1992) found that clear standard played important  
8 role in developing a better control system.  
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12 Given the important role of control, this study proposes a management control system to  
13 control how the strategy in the company runs according to plans and objectives. According to  
14 Purnamasari (2009) which stated that to encourage companies to be able to compete in increasingly  
15 fierce global competition, the management control is an absolute requirement that must be  
16 conducted by the professional managers. It is a process and structure which systematically  
17 arranged by management in controlling activities so that the goals and objectives set by the  
18 company can be achieved. Therefore, Management Control System will moderate the effect of  
19 Human and Physical Capital on Financial Condition.  
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Figure 1. Theoretical Framework

### **Hypotheses**

Based on this framework, a conceptual framework is developed for this research as follows:

H1: Human Capital has a positive effect on the Regional Financial Condition.

H2: Physical Capital has a positive effect on the Financial Conditions.

H3: Management Control System moderates the relation between Human Capital and Financial Conditions

### **METHOD**

1 **Participants**

2 Participants were employees of the Regional Financial and Asset Management Agency  
3 who were the Financial Report Compilation team in the Golden Triangle area of South Sulawesi.  
4 The South Sulawesi Golden Triangle region was actually formed from a path connecting three  
5 regencies and big cities (Makassar, Gowa and Maros). Participants worked as Secretary,  
6 Budgetary, Treasury, Accounting and Information Technology and Regional Assets. This study  
7 took 5 people in each field which chosen randomly so that 25 samples per region could be obtained,  
8 and amount of 75 samples were obtained from three gold triangle regions. The number of female  
9 participants were 53% and male 47% with most participants had bachelor degree (81%).  
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14 **Measures**

15 This study used scale which were developed by the researchers in accordance with the  
16 theory of each variable. There are four measuring instruments in this study. The following table  
17 describes the construction of the measure:  
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22 Table 1. *Operational Variable*

Variable	Dimension	Indicator
<i>Human Capital</i> (Mignonedan O'Neil, 2005)		Special Competence Work Experience Skill
<i>Physical Capital</i> (Baldi, 2013)		Availability of Natural Resources and the Environment Government Investation Facilities and Infrastructure (Computer and Internet Networks)
Management Control System (Prabawati, 2010)		Strategic Planning Implementation and Measurement Evaluation
Financial Condition (Dinapoli, 2011)	Environment	Community needs Population Property Value Inflation Individual income Budgeting
	Organization	Budget Cost Timeliness and accuracy of financial transactions Quality and timeliness of financial reporting
	Financial	Limitation of Debt Potential Taxes Legality of Expenditures

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The measures were developed in Indonesian using a 5-point Likert scale (1= Strongly Disagree to 5= Strongly Agree). The results showed that the data had four independent

constructs confirming the proposed theoretical model. Outer loading value indicated that the convergent validity of the data had coefficients above 0.50 for each item and the t-value for each item above 1.96. In addition, the value of Average Variance Extracted (AVE) in each construct variable was greater than 0.50. Based on the results of the analysis, all constructs fit into the convergent validity criteria. Those can be seen in the following table:

Table 2. *Average Variance Extracted (AVE)*

Variabel	AVE
Human Capital	0.617
Physical Capital	0.600
Management Control System	0.534
Financial Condition	0.702

Source: Primary data

The reliability test aims to see the composite reliability of each variable construct and also showed the appropriate value. The results suggested that the constructs had composite reliability coefficients above 0.70. So, it can be concluded that the construct had acceptable reliability.

Table 3. *Composite Reliability*

Variable	Composite Reliability
Human Capital	0.826
Physical Capital	0.818
Management Control System	0.931
Financial Condition	0.976

Source: Primary data

### ***Procedure***

The data were collected by using a questionnaire which were developed in Indonesian. Data collection was conducted using a three-wave data collection technique to avoid common method bias. In the first phase, researchers collected demographic, human capital and physical capital data. After a week, researchers then collected data for the Management Control System and the following week the Financial Condition data. Participants were asked to commit to filling out the questionnaire from the beginning to the end of the data collection which lasted for one month. All participants (75, 100%) fully participated in the study from the beginning to the end of the data collection.

## **RESULTS AND DISCUSSION**

### ***Results***

This study conducted several stages in the data analysis. First, the data were analyzed descriptively. Secondly, the relation between the variables were tested with Product Moment correlation. Lastly, the Hierarchical Moderated Regressions test was conducted.

Table 4. *Descriptive Statistics and Bivariate Correlations*

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
Human Capital	11.43	1.21						
Physical Capital	11.79	1.23	.52**					
MCS	12.12	1.15	.45**	.54**				
FC(Environment)	22.90	2.52	.53**	.56**	.73**			
FC(Institution)	12.17	1.22	.30**	.34**	.62**	.78**		
FC(Financial)	12.26	1.35	.46**	.46**	.67**	.72**	.64**	
FC Total	47.33	4.63	.50**	.53**	.76**	.86**	.87**	.85**

Note: *N*= 75, *M*= Mean, *SD*= Standard Deviation, MCS= Management Control System, FC= Financial Condition, \*\*  $p < .01$

Table 4 above showed the average values and standard deviations for each variable in the study. In addition, the relation between variables was presented in the form of product moment correlation coefficient. Based on the analysis of that relation, it was generally concluded that all variables in the study were positively and significantly correlated. The level of relation between these variables ranged from  $r = .34$  ( $p < .01$ ) to  $r = .86$  ( $p < .01$ ). The Human Capital had a fairly strong correlation with the Financial Condition ( $r = .50$ ,  $p < .01$ ) and so did the Physical Capital ( $r = .53$ ,  $p < .01$ ). The relation between the Management Control System and the Financial Condition was even stronger with the correlation coefficient which reaching  $r = .76$  ( $p < .01$ ). The results indicated that the two independent variables (i.e. Human Capital and Physical Capital) and Management Control System as moderator variables had a strong positive relation with Financial Condition.

After knowing the relation between variables, then the Hierarchical Moderated Regressions analysis was performed. The following were the results of the analysis:

Table 5. *Moderated Regressions with Financial Condition as Dependent Variable*

Model		$R^2$	<i>Adj. R</i> <sup>2</sup>	$\Delta R^2$	$\Delta F$	$\beta$
1	Human Capital	.25***	.24	-	24.81	.50***
2	Human Capital Physical Capital	.35**	.33	.10**	10.86	.31** .37**
3	Human Capital Physical Capital HC*MCS	.36**	.34	.01	1.47	.32** .37** -.12
4	Human Capital Physical Capital HC*MCS PC*MCS	.43**	.40	.06**	7.98	.33** .33** -.33** .34**

Note: *N*= 75,  $\Delta$ = change,  $\beta$ = Standardized Beta Weight, HC= Human Capital, PC= Physical Capital, \*\*\*  $p < .001$ , \*\*  $p < .01$

1 Hierarchical Regression Analysis with moderated regression was performed. This analysis  
2 technique allowed researchers to capture the incremental contribution of each variable which  
3 entered in the model. The first model, with Human Capital as the only predictor, showed a  
4 significant impact on the Financial Condition ( $Adj. R^2 = .25, p < .001$ ). In the second model,  
5 Physical Capital entered and contributed a positive and significant *added value* to the Financial  
6 Condition prediction model ( $\Delta R^2 = .10, p < .01$ ). In model 3, the interaction between Human Capital  
7 and Management Control System did not significantly increase the predicted value of the Financial  
8 Condition ( $\Delta R^2 = .01, p > .05$ ). Model 4 was the regression model that gave the highest contribution  
9 to the variance of the Financial Condition in the presence of the additional interaction variables of  
10 Physical Capital and Management Control System ( $\Delta R^2 = .06, p < .01$ ).

11 The analysis showed that the impact of Human Capital on Financial Condition was proven  
12 to be positive and significant across all regression models. When there were no other variables in  
13 the model, the impact of Human Capital on Financial Conditions tended to be strong ( $Adj. R^2 =$   
14  $.24, \beta = .50, p < .001$ ). The impact of Human Capital on Financial Conditions remained positive  
15 and significant across all the regression models, including in model 4 ( $Adj. R^2 = .40, \beta = .33, p$   
16  $< .001$ ). Based on these results, the H1 was accepted which meant the Human Capital had a positive  
17 effect on the Financial Condition.

18 The presence of Physical Capital to predict Financial Condition also had a positive impact  
19 on all regression models. In model 4, Physical Capital had the same effect as Human Capital ( $Adj.$   
20  $R^2 = .40, \beta = .33, p < .001$ ). This perceived that H2 was accepted, which meant that Physical Capital  
21 affected the Financial Condition.

22 In model 4, the interaction between Human Capital and Management Control System  
23 contributed negatively to Financial Condition ( $R^2 = .10, p < .01$ ). It meant that the impact of Human  
24 Capital on Financial Conditions depended on the high or low Management Control System ( $\beta = -$   
25  $.33, p < .01$ ). The higher the Management Control System then the lower the impact of Human  
26 Capital on Financial Conditions, and vice versa. This finding supported the research hypothesis  
27 (H3) which stated that the Management Control System moderated the relation of Human Capital  
28 to Financial Conditions.

29 The interaction between Physical Capital and Management Control System also showed a  
30 significant impact on the Financial Condition ( $\beta = .34, p < .001$ ). The impact of these interactions  
31 tended to be positive which meant that Physical Capital would increasingly have an impact on the  
32 Financial Condition when the Management Control System is high, conversely if a low  
33 Management Control System could reduce the impact of Physical Capital on the Financial  
34 Condition. These results were in accordance with the previously proposed H4.

35 The theoretical model which carried by the researcher was in accordance with empirical  
36 data which found with the suitability of the regression model up to  $R^2 = .43$  ( $p < .01$ ) which meant  
37 that the regression model could predict 43% of the variance of the Financial Condition.

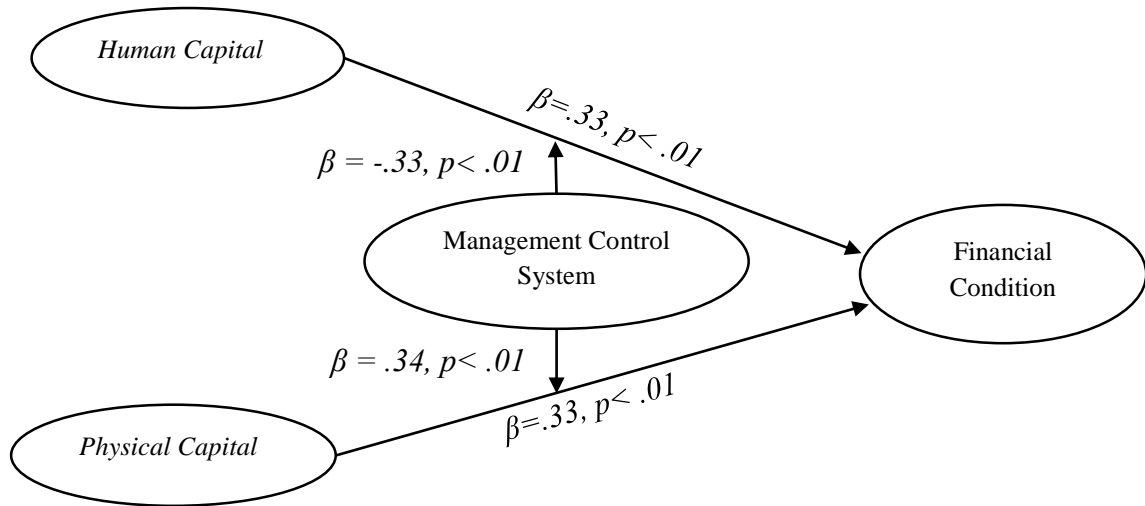


Figure 2. Empirical model and coefficients

Figure 3 below illustrates the interaction between Human Capital and Management Control Systems in predicting Financial Conditions. The graph explained that the value of the prediction model was higher when the Management Control System was at a low level ( $R^2 = .156$ ), compared to when it was at a high level ( $R^2 = .131$ ). So that the existence of a high Management Control System could reduce the impact of Human Capital on Financial Conditions.

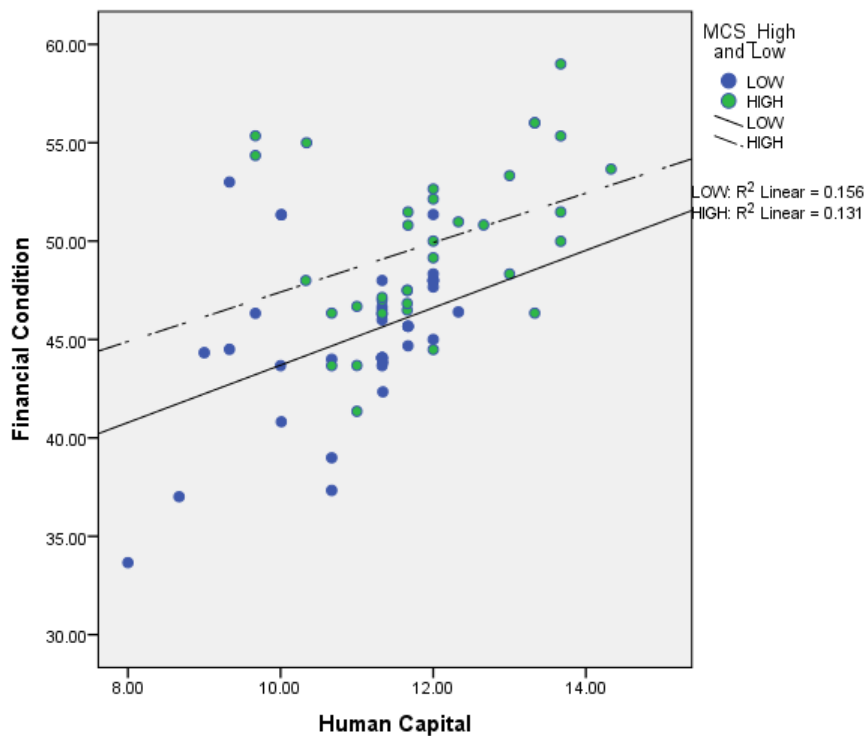


Figure 3. Interaction between Human Capital and Management Control System

The interaction between Physical Capital and Management Control System can be seen in Figure 4. Unlike the previous interactions, the interaction in figure 4 showed that the impact of

Physical Capital on Financial Conditions was stronger when the Management Control System was also at a high level ( $R^2 = 0.217$ ), compared when dealing at low levels ( $R^2 = 0.071$ ). A high Management Control System could support the positive impact of Physical Capital on Financial Conditions. The low Management Control System could result in the low impact of Physical Capital on Financial Conditions.

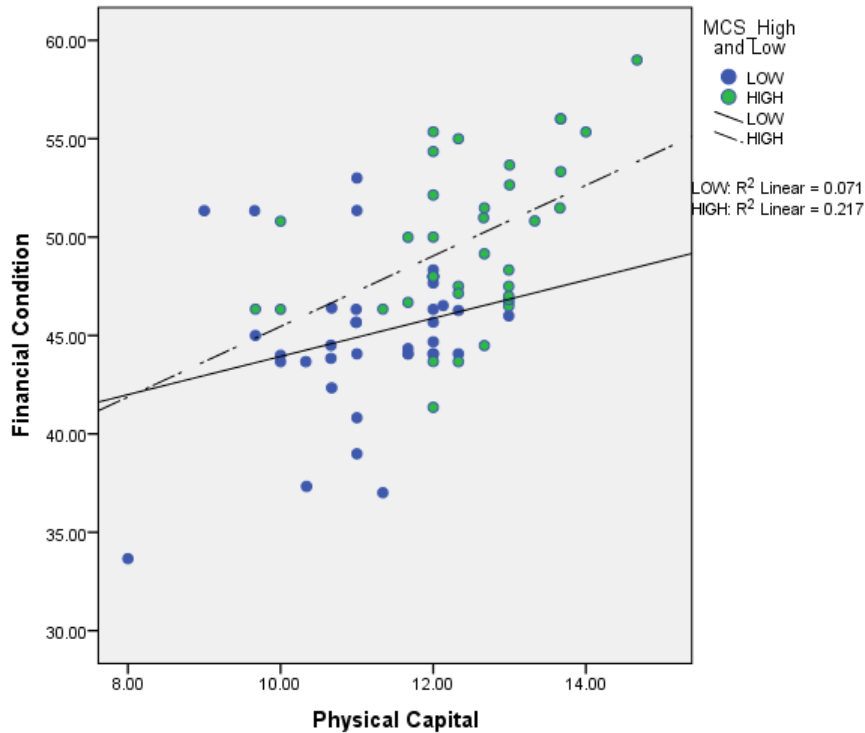


Figure 4. Interaction between Physical Capital and Management Control System

## DISCUSSION

### *The Effect of Human Capital on Financial Conditions*

The analysis showed that Human Capital had positive influence on Financial Conditions. Based on the analysis, the higher Human Capital in the terms of special competencies, work experience and skills, the more likely financial condition leverages in Makassar, Gowa and Maros. This suggests that Human Capital affects environmental, institutional, and financial conditions of these three areas. In this study, a successful financial condition referred to environment, institution and finances dimensions in three key areas of South Sulawesi (i.e. Makassar, Gowa and Maros). Firstly, within the environmental dimension there were community needs, populations, property values, inflation, individual income and budgeting, all these necessary to establish a stable financial condition. Secondly, human resources also contribute to institutional dimensions of financial performance. Human Capital aspects supports the organisation strategic in which there was availability of budget, timeliness and accuracy of financial transactions and the quality, and timeliness of financial reporting. Lastly, the workforce competence also provided supports for the financial dimension which included debt limits, tax potential and legality of expenditure. Successful financial dimension, in this regard, relied upon the workforce competence. Human capital serves a means to monitor debt limits and tax management, for example. So the increase or

1 decrease in Human Capital had an influence on the Financial Condition of the government in these  
2 regions. Similar research was also found by Zulkifli (2018), Ramli et al. (2014), Nimtrakoon  
3 (2015), Ervina et al. (2008), Is et al. (2014), which stated that Human Capital had a positive effect  
4 on Financial Conditions.  
5

6 The RBT (Barney, 1991, 2001) has explained the importance of valuable and rare resources  
7 in fostering organisation competitive advantages. Human Capital also acted as a valuable resource  
8 for organizational success which also includes financial achievement within organisation. As the  
9 organisation maintains sufficient quality of Human Capital, the workforce will strive to facilitate  
10 sustainable financial performance. Thus, according to this study, the RBT successfully explained  
11 the role of Human Capital in predicting Financial Condition.  
12

13 Special competence, work experience and skills became important points in improving  
14 Financial Conditions because with those could be an important part in improving innovation,  
15 strategies and objectives of the organization. Participants assumed that the development of human  
16 capital was also able to increase the ability of an area in improving the economy and maximizing  
17 its potential, but this study assumed that it is unable to affect the company's Financial Condition.  
18

19 This research reinforced the notion that the role of Human Capital in a government needed  
20 to be considered because the better Human Capital was able to strengthen the achievement of the  
21 objectives of an area. The fulfillment of the needs of the residents of an area could be improved  
22 with the support of good Human Capital.  
23

### 24 ***The Effect of Physical Capital on Financial Conditions***

25 The results showed that Physical Capital had a positive effect on the Financial Conditions.  
26 The level of Physical Capital in terms of the availability of natural resources and the environment,  
27 government investment, facilities and infrastructure (e.g. computers, internet access) had a  
28 significant impact on the fulfilment of the environmental, institutional, and financial sectors in the  
29 government areas of Makassar, Gowa and Maros. Physical Capital contributed positive impact on  
30 leveraging the areas' Financial Condition which also included fostering environmental,  
31 institutional, and financial aspects.  
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33 As mentioned earlier, there are there distinct dimensions namely the environment,  
34 institutions and finances. These three aspects were applied to depict financial achievement of local  
35 government in South Sulawesi (i.e. Makassar, Gowa and Maros). In leveraging financial condition,  
36 the governments should scrutinize the community needs, populations, property values, inflation,  
37 individual income and budgeting. The second dimension was the institution in a sense that there  
38 was budget availability, timeliness and accuracy of financial transactions, and the quality and  
39 timeliness of financial reporting. The third dimension was finance which covered debt limits, tax  
40 potential and legality of expenditure.  
41

42 The RBT has supported that Physical Capital (e.g. technology) has provided valuable  
43 resources for the governmental organisations in South Sulawesi, Indonesia. The theory and  
44 previous findings have been supported by this empirical study. Physical Capital had significant  
45 positive influence on the Financial Condition of the government in these three regions; Makassar,  
46 Gowa and Maros. Barney (2001) proposed that competitive advantages of an organisation can be  
47 achieved by utilizing existing valuable and rare resources in organisation. Consistently, in the case  
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1 of local government organisations in Indonesia, it appeared that Physical Capital added significant  
2 amount of incremental variances to the development of Financial Condition. Physical assets,  
3 technologies, devices and other facilities were viewed as the essential elements of successful  
4 Financial Conditions.  
5

6 This study was also in line with research conducted by Zulkifli (2018), Nimtrakoon (2015),  
7 Ervina et al. (2008), Is et al. (2014). However, the effect could be indirect as other variables also  
8 might also influence the relationship. For example, Nirvana et al. (2014) discovered that Cultural  
9 Capital moderated the Physical Capital - Financial Conditions relationship. Therefore, this study  
10 also considered testing the effect of Management Control System in moderating the effect.  
11

12 Limitations of Physical Capital were often became a problem of a local government  
13 regardless the quality of Human Capital. Generally, regions that had outstanding human capital  
14 would be more developed if juxtaposed with the availability of natural resources and the  
15 environment, adequate government investment, facilities and infrastructure (e.g. computers). It  
16 seems in this study, the participants considered that Physical Capital in a form of technologies,  
17 facilities and infrastructures provide significant supports for Financial Condition.  
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### 23 ***The Moderation Effect of Management Control System on the Relation of Human Capital and*** 24 ***Financial Condition*** 25

26 Apart for the direct effect of Human Capital on Financial Condition, this study also found  
27 that Management Control System moderated the effect of Human Capital on Financial Condition.  
28 This research was supported by the Control Theory (Snell, 1992) as the theory stated that managing  
29 human resources must be supported with input, behavioural, and output control. In addition, the  
30 Control Theory and the Goal Setting (Latham and Locke, 1979) postulated that clear and  
31 crystalized standard potentially emphasize the effect of resources. In addition, the goal setting  
32 principles have stressed enough on the importance of specific and clear goals. Say it differently,  
33 the theoretical background has assumed that a company with supportive human resources but zero  
34 goals and rules would experience constraints to rise the Financial Condition.  
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39 This study discovered an interesting findings related to the moderation effect of the  
40 Management Control System. The presence of a lower degree of Management Control System  
41 could trigger improvement in local government organisation. In contrast, high degree of  
42 Management Control System would reduce the effect of Human Capital on Financial Condition.  
43 The theories have supported that Management Control System facilitated the Human Capital –  
44 Financial Condition relationship. The moderating effect seems to be more positive as the theories  
45 suggested that clear and standardized goal of Human Capital management could improve Financial  
46 Condition. However, this study showed opposing evidence as the moderating effect was found to  
47 be negative. This indicated that the existence of Management Control System could weaken the  
48 role of Human Capital on Financial Condition.  
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53 In the local government areas, Human Capital significantly determined the fluctuation of  
54 Financial Condition. However, as the Management Control System implemented with  
55 considerably high degree of input, behavioural, and output control, Human Capital would be less  
56 influential. The Management Control System improves the Human Capital management by  
57 standardizing control over the input quality, specifying work behaviour, and directing control to  
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1 attain desired output. The government officials could have perceived Human Capital as an  
2 insignificant resource as the management of the human resources was highly controlled. Simply,  
3 the local governments could discarded the importance of Human Capital for Financial Condition  
4 as they perceived high Management Control System.  
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7 The results of this study were in line with the research conducted by Chandra (2017), Ong  
8 et al. (2016), Rachma (2014) where they all found that the Management Control System had a  
9 significant influence on Human Capital and Financial Conditions. However, despite the effect,  
10 scholars and government officials should consider how the Human Capital and Management  
11 Control System interact to predict Financial Condition. In terms of predicting the local government  
12 Financial Conditions, as the degree of Management Control System increases the Human Capital  
13 impact on Financial Condition declines. Thus, Organisations that have a poor Management Control  
14 System may require high quality of Human Capital.  
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### 19 ***The Moderation Effect of Management Control System on the Relation of Physical Capital and*** 20 ***Financial Condition*** 21

22 The results of this study also indicated that the Management Control System was able to  
23 moderate the effect of Physical Capital on Financial Conditions. The relation between Physical  
24 Capital and Financial Conditions is increasing as the Management Control System included in the  
25 prediction model. As predicted previously using the Control Theory by Snell (1992), high degree  
26 of control over input, behaviour, and output also improve the quality of Physical Capital. In this  
27 respect, Physical Capital could be more influential as the Management Control System ensure its  
28 quality by controlling input of physical resources, controlling behaviours in utilizing the resources,  
29 and directing the outputs of using the resources. As the Management Control System increases, it  
30 improves the effect of Physical Capital on Financial Condition.  
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35 Unlike the former moderating effect, Management Control System and Physical Capital  
36 went hand-in-hand in predicting Financial Condition. It indicated that the effect of Physical  
37 Resources on Financial Performance depended on the degree of control in organisation.  
38 Organisations with abundant of Physical Resources may not always provide high performing  
39 Financial Condition unless they implement high state of Management Control System. This shades  
40 the light on the importance of Management Control System in supporting the role of Physical  
41 Capital. Hypothetically, if the organisations tend to have less Physical Resources, managing the  
42 resources using the Management Control System principles will accentuate the effect of the  
43 resources on the organisations' Financial Condition.  
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47 The results were in line with some previous investigations conducted by Chandra (2017),  
48 Ong et al. (2016), and Rachma (2014). In those studies, Management Control System was one of  
49 predictors of Financial Performance in organisations. The effect of Management Control System  
50 is important as it serves as control over resources quality. Anthony and Govindarajan (2005) stated  
51 that Management Control System was also a process for detecting and correcting errors at work.  
52 The focus is on human behaviours and the implementation of plans. The focus on behavioural  
53 control also requires a strong psychological aspects.  
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57 In the local government organisation, the three golden areas of South Sulawesi may have  
58 relied on the level of Management Control System to attaining expected level of Financial  
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1 Condition. In this regard, the government official should strive to optimize the control over the  
2 physical resources. The control system should manage the selection of equipment, human  
3 behaviours related to the application of the equipment, and it also should monitor the effect of  
4 certain technologies or devices on outputs. Physical Capital positively predict the local government  
5 Financial Condition as far as the physical resources controlled with systematic procedure starting  
6 from input to output.  
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### 10 ***Implications***

11 This research empirically examined the influence of moderating effect of Management  
12 Control Systems on the two local government financial condition antecedents; Human and  
13 Physical Capital. The results provided supports that perceived Management Control System  
14 significantly determined the effect of Human Capital and Physical Capital on Financial Condition.  
15 However, this moderator behaved differently towards Human and Physical Capital. Management  
16 Control System tended to alter the low quality of Human Capital while at the same time strengthen  
17 the Physical Capital – Financial Condition Relationship.  
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22 In a case where the local governments implement high Management Control System, the  
23 Physical Capital will be more likely to foster Financial Condition. Unfortunately, this condition  
24 will also reduce the Human Capital effect on Financial Condition. Albeit the organisations have  
25 exhibited sufficient workforce competence, it will have less impact on the Financial Condition as  
26 the Control System is highly managed. Presumably, outstanding Human Capital can tolerate a poor  
27 Management Control System and still positively impacts Financial Condition. Control System is  
28 important for directing the effect of resources on Financial Condition. However, the local  
29 government officials, in this case, should be aware that increasing control over Human Capital can  
30 reduce the effect of human resources on Financial Condition. Human Capital in the local  
31 government areas may not have less impact on financial performance as the organisations  
32 implement high control system.  
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### 39 ***Limitations and Future Research Directions***

40 This study employed a set of questionnaire as valid and reliable measures of variables being  
41 studied. The initial attempt was to collect objective data. However, the existing objective data were  
42 not adequately standardized across different organisations. The data were also strictly prohibited  
43 for non-official parties. Likewise, researchers cannot find alternative objective data that definitely  
44 measured the level of achievement of the whole existing variables, other than the opinions of  
45 employees who work in the organization. This study, then, employed Subject Matter Experts  
46 (SMEs) perception towards each variable in the study and this procedure was supported by the  
47 authorities. Therefore, future studies can repeat this method using objective data sources from  
48 government officials by establishing mutual collaborations.  
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53 Furthermore, although this research succeeded in involving representatives from all  
54 agencies with varying levels of position, the number of participants involved was still small  
55 compared to some previous studies. By increasing the number of participants and involving more  
56 governmental organisations, the future studies would provide more information regarding the  
57 effect of control system in organisation.  
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3 **CONCLUSIONS**

4 This study has two folds. Firstly, it contributed a new information related to the effect of  
5 two key resources (i.e. Human and Physical Capital) on financial performance in governmental  
6 organisations. Secondly, this study broaden our understanding towards the unique role of  
7 Management Control System in the local government organisations in South Sulawesi, Indonesia.  
8 The first part of the findings was consistent with the RBT as both Human and Physical Capital  
9 significantly predicted Financial Condition. However, the second part of the findings was mixed  
10 as Management Control System negatively moderated the effect of Human Capital while at the  
11 same time also positively moderated the effect of Physical Capital on Financial Condition. This  
12 study highlighted the importance of improving the standard of control system in managing the  
13 local government organisations. Although it potentially reduces the effect of Human Capital, high  
14 degree of control will help organisations to maintain desired Financial Conditions.  
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# Heliyon

## THE EFFECT OF HUMAN CAPITAL AND PHYSICAL CAPITAL ON REGIONAL FINANCIAL CONDITION: THE MODERATING EFFECT OF MANAGEMENT CONTROL SYSTEM

--Manuscript Draft--

<b>Manuscript Number:</b>	HELIYON-D-21-01738R1
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<b>Abstract:</b>	<p>This study aims to examine the effect of Human Capital and Physical Capital on Regional Financial Condition with a Management Control System as moderator. Participants were employees of the Regional Financial and Asset Management Directorates which were located in three major cities/districts in the province of South Sulawesi, Indonesia. The 75 randomly selected participants involved in a three-wave data collection procedure. Four measures were developed (i.e. Human Capital, Physical Capital, Management Control System, and Financial Condition) which were found to be constructively valid and reliable for research purposes. The results showed that the Human Capital and Physical Capital directly influenced the Financial Conditions. The effect of Human and Physical Capital were moderated by the Management Control System. Management Control System negatively moderated the effect of Human Capital while at the same time also positively moderated the effect of Physical Capital on Financial Condition. This study collected participant's perceptions towards the study variables without any further investigation to the objective measures. Although, some scholars may find this as the lack of evidence against the actual financial conditions, acknowledging experts' perceptions should provide a better understanding on the experienced financial condition. Various studies have investigated some factors which may affect the Financial Conditions. However, this study proposed an examination of the role of Management Control System. In this case, a capital which is owned by the financial organizations cannot provide a direct impact on the Financial Conditions if there is no role of the Management Control System.</p>
<b>Opposed Reviewers:</b>	

Dear editor and reviewer,

As suggested, we included our ethic approval letter and the informed consent form in the revised version of the manuscript. Please let us know if anything we should do to expedite the publication process.

Sincerely,  
Asri Usman

# THE EFFECT OF HUMAN CAPITAL AND PHYSICAL CAPITAL ON REGIONAL FINANCIAL CONDITION: THE MODERATING EFFECT OF MANAGEMENT CONTROL SYSTEM

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## Abstract

This study aims to examine the effect of Human Capital and Physical Capital on Regional Financial Condition with a Management Control System as moderator. Participants were employees of the Regional Financial and Asset Management Directorates which were located in three major cities/districts in the province of South Sulawesi, Indonesia. The 75 randomly selected participants involved in a three-wave data collection procedure. Four measures were developed (i.e. Human Capital, Physical Capital, Management Control System, and Financial Condition) which were found to be constructively valid and reliable for research purposes. The results showed that the Human Capital and Physical Capital directly influenced the Financial Conditions. The effect of Human and Physical Capital were moderated by the Management Control System. Management Control System negatively moderated the effect of Human Capital while at the same time also positively moderated the effect of Physical Capital on Financial Condition. This study collected participant's perceptions towards the study variables without any further investigation to the objective measures. Although, some scholars may find this as the lack of evidence against the actual financial conditions, acknowledging experts' perceptions should provide a better understanding on the experienced financial condition. Various studies have investigated some factors which may affect the Financial Conditions. However, this study proposed an examination of the role of Management Control System. In this case, a capital which is owned by the financial organizations cannot provide a direct impact on the Financial Conditions if there is no role of the Management Control System.

**Keywords:** human capital, physical capital, management control system, financial condition, and Indonesia

## INTRODUCTION

Financial Condition is determined by the ability of an area to fulfill an obligation for prospering or serving a community. In this regards, there are three core dimensions to evaluate the financial conditions they are environmental, institutional and financial dimensions (Dinapoli, 2011). These three dimensions will be interconnected to produce a sufficient Financial Condition.

1 By fulfilling all these dimensions, government will be able to bring more stable financial  
2 conditions.  
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4 Firstly, the environmental dimension is the assessment of Financial Conditions which  
5 assessed based on how a government supports or impedes regulations, especially on bringing  
6 innovations to the community. Secondly, the institutional dimension is a management practice and  
7 legislative policy which guides the fiscal decision making. Its function is often as a response to the  
8 environmental or political factors (Dinapoli, 2011). Lastly, financial dimension is most related to  
9 financial performance. This particular dimension includes potential tax or incomes in a particular  
10 region and a debt limit and a legality of expenditure from a region. For some countries, it also  
11 consists of fiscal decentralization management in which each region will obtain a budget for the  
12 funds to be managed.  
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16 One of the most important questions to this issue is, what are variables may potentially  
17 predict financial conditions. Considering the important roles of resources, the Resource Based  
18 Theory (Barney, 1991) supports the notion that Human Capital and Physical Capital provides  
19 significant resources for maintaining sufficient financial conditions. Human capital becomes  
20 considerably important because it is a source of innovation and strategy renewal. Human Capital  
21 is related to any knowledge, skills, abilities and attitudes owned by personnel in organisations  
22 which are highly supportive for organizational success (Perrotta, 2018). Further, it can be fostered  
23 from an applied research, management objective, reengineering process and improvement or  
24 development of workforce skills. Furthermore, human capital creates incremental values to  
25 organisations on a daily basis, via motivation, commitment, competence and effectiveness of the  
26 teamwork. However, each organization offers distinctive approaches in managing human capital  
27 and it also means different values (Lepak and Snell, 2002). Thus, human capital provides unique  
28 contributions to financial condition based on unique approaches given by organisations.  
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34 In addition to Human Capital, Physical Capital also adds incremental variance to the  
35 successful financial conditions. The notion of Physical Capital includes natural resources and other  
36 technological devices (Galor and Moav, 2004). The existence of Physical Capital supports the  
37 improvement of the Financial Condition of an area. To illustrate, the development of the basic  
38 physical conditions such as sanitation, clean water, and electricity in an area will also help to foster  
39 the services and welfare for the community which may later improve Financial Conditions.  
40 Physical Capital is also useful for creating additional values to producing desired input. Thus, it is  
41 reasonable to conclude that both human and physical resources act together to influence a region  
42 financial condition.  
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47 The direct effect of these two capitals (i.e. human and physical) may have been moderated  
48 by the level of control performed by organisations. In Indonesia, some empirical investigations  
49 conducted by Chandra (2017), and Sari and Fitriani (2009) found that the management control  
50 system was able to improve Financial Conditions. In these two studies, Human Capital and  
51 Physical Capital directly impacted financial performance where the organisations had sufficient  
52 control over the resources. As a result, the organisations performed better and showed expected  
53 financial conditions.  
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57 The concept of Control theory in strategic human resource management from Snell (1992)  
58 has provided a clear arguments on how high control facilitates positive effect of human capital and  
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1 physical capital on desired financial conditions. According to the theory, Human Capital and  
2 Physical Capital will leverage financial performance only if an organisation implement certain  
3 degree of control over human capital inputs, behavioural controls, and desired outputs. This further  
4 suggests that possessing a management control system favours the effect of Human and Physical  
5 Capital on Financial Conditions.  
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8 Accordingly, management control system becomes a moderation in creating good  
9 Financial Condition for one particular region. In a developing country like Indonesia, the  
10 management control system is one of the strongest foundations of good governance (Purnomo,  
11 and Budiawan, 2014). The internal control system includes various management tools that aim to  
12 achieve a broad range of objectives. In addition, Riawan (2016) stated that the management control  
13 system is able to improve the Financial Condition of an organisation. Meanwhile, Masyur (2016)  
14 postulated that local governments encounter difficulties in implementing a good control system  
15 strategy because the absence of synergy between Human Capital and the control strategy.  
16 Subsequently, this made the public services became less efficient. Control becomes a crucial  
17 element to ensure that financial condition is achieved as expected.  
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22 Management control system consists of management control structures and processes  
23 (Halim et al., 2012). The control structure is centered on a variety of responsibility centers, while  
24 the management control process includes budget preparation, implementation and measurement  
25 as well as reporting and analysis. In the process of the management control, the decisions are made  
26 based on the procedures and other schedules which carried out repeatedly year after year. Those  
27 procedures usually start from programming. The program is translated into the form of a budget,  
28 then the company operates based on a predetermined budget, procedure and policy. The final  
29 results are then compared with the budget, after being evaluated and improved if necessary. Since  
30 the procedure is carried out repeatedly every year, then management requires a management  
31 control system to improve its performance so that the company's goals can be achieved.  
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36 By applying the Resource Based theory and Control theory in Strategic Management, one  
37 should be able to capture that the presence of high management control will leverage the effect of  
38 human and physical capital on financial condition. However, some contextual conditions may also  
39 influence this argument. For instance, Indonesia as a developing countries implements a  
40 decentralisation policies which also include financial autonomy for its provinces. Consequently,  
41 some experts and practitioners have questioned about some antecedents related to regional  
42 financial performance.  
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46 Law No. 23 of 2014 states the implementation of regional government directed to  
47 accelerate the realization of community welfare through improving services, empowerment, and  
48 community participation, as well as enhancing regional competitiveness by taking it into an  
49 account of the principles of democracy, equality, justice, and uniqueness of the area in the system  
50 of the Unitary State of the Republic of Indonesia. Regional autonomy is a part of decentralization.  
51 It constructs each region to have the right and obligation for regulating their own area but with the  
52 control of the central government and in accordance with the law. A fiscal decentralization is  
53 implemented in order to encourage several levels of government which are able to control each  
54 region. The local governments in each region will accommodate the aspirations of a community  
55 and be obliged to prosper the community in terms of services. The success of a regional autonomy  
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1 is integrated with the ability of a region to manage the funds that have been budgeted to its area.  
2 In addition, the local governments should also be able to utilize the resources that are already  
3 owned by the region. Therefore, the success of a regional autonomy significantly is related to the  
4 Financial Condition of the region.  
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6  
7 Unfortunately, contrasting views emerged regarding the effect of Human Capital and  
8 Physical Capital on Financial Conditions in Indonesia. For instance, Nirwana and colleagues  
9 (2014) found that Human Capital and Physical Capital had non-significant influence on Financial  
10 Conditions. However, they found it emerged after intervening through the culture. While, Zulkifli  
11 et al. (2018) found contrasting findings where Human Capital and Physical Capital had a positive  
12 effect on Financial Performance. Another finding suggested that the differences were caused by  
13 the influence of Indonesia's national culture. The level of uncertainty was found to be higher in  
14 Indonesia than Australia which later reduce the effect of any resources on financial performance  
15 (Graham and Sathye, 2017).  
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17  
18 Additionally, pressure from the central government has imposed some policies in  
19 managing budget in local government. Although provincial governments had adapted a new  
20 accounting system, the issue was the local officials found it difficult to maintain a well-controlled  
21 and structured system (Harun and Kamase, 2012). In a similar vein, Mir and Sutiyono (2013) have  
22 discovered that the demand, supply, and the quality of Indonesian's local accounting system lacked  
23 of parity which also means the financial system implemented less effective control. This, then,  
24 causes a subsequent effect on the local financial performance as an effective decision-making and  
25 efficient management would be difficult to implement. Thus, in this situation exhibiting an  
26 effective control in managing resources lead to better financial performance.  
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29 This investigation is necessary in order to further understand the antecedents of financial  
30 conditions and the role of effective management control. Local governments in Indonesia may  
31 have undergone less effective control over accounting system and failed to address the issue since  
32 their financial reports were in a category of acceptable without exceptions. Sulawesi Selatan, in  
33 this case, acted as the main gate of Eastern Indonesia where many important businesses happens.  
34 Despite the prestigious financial condition, this local government was imposed to implement  
35 certain regulation from the central government. Additionally, some resources may have been used  
36 to support the financial performance. However, more empirical information is necessary to explore  
37 whether those resources influence financial condition or not.  
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40 Then, the theory and empirical evidence led this study to exert management control system  
41 as its moderation variable on observing the influence of Human Capital and Physical Capital on  
42 the Financial Conditions of the area which was chosen in this study. A fiscal decentralization is a  
43 government policy to increase the ability of an area to manage its own region. The policy will  
44 make the distance between the government and the community will be tightened by the presence  
45 of government representatives in each region who can take their respective policies to maximize  
46 the services to the community, with the management of the economic resources in the region. The  
47 local governments faced difficulties in implementing effective control system strategy because  
48 they were unable to link the relationship between Human Capital and the control strategy. As the  
49 results, it caused the public services became less efficient.  
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1 Having considered the above discussions, the research objectives are formulated as  
2 follows;  
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- 4 1. To examine the effect of Human Capital on Regional Financial Conditions.
- 5 2. To examine the effect of Physical Capital on Regional Financial Conditions.
- 6 3. To examine the effect of Human Capital on Regional Financial Conditions which are  
7 moderated by the Management Control System.  
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## 10 **LITERATURE REVIEW AND HYPOTHESES**

11 The Public Sector Accounting Board (2007) defined the Financial Conditions as the health  
12 of government finances as indicated by their ability to fulfill the financial obligations and the  
13 service commitments to the public, creditors, employees and others, While according to Dinapoli  
14 (2011), the Financial Condition is the ability of the local governments to comply the expenditure  
15 budget by taking the source of local revenue, and continuously providing services to the  
16 community.  
17

18 Financial factors in Nirvana et al. (2014) is a financial distribution which run by the  
19 financial system. The financial system seeks to ensure adequate financial judgment and cover up  
20 liquidity. The Indicators of financial factors according to Dinapoli (2011) are the debt limits, the  
21 tax potential and the legality of expenditure. Institutional factors according to Dinapoli (2011) are  
22 management practices and the existence of policies or regulations of local governments which  
23 guarantee the implementation of the healthy governance. Furthermore, the institutional indicators  
24 are the budget and financial variance, the timeliness and accuracy of financial transactions, and  
25 the quality and timeliness of financial reporting.  
26

27 In addition, Dinapoli (2011) stated that the Financial Conditions are determined by a  
28 combination of government environment, institutional and financial factors. For example when  
29 there is a decrease in population of a government, so there will be a reduction in the tax revenue  
30 (negative environmental factors), but the government can overcome this by reducing services.  
31 Increasing the tax rate, striving for the development of economic resources which ultimately  
32 determine the Financial Condition of the local governments.  
33

34 Financial condition in a regional level can be influenced by several factors such as CEO  
35 power (Daily and Johnson, 1997), environmental and operational management (Sueyoshi and  
36 Goto, 2010), and technical performance (Kristensen et al., 2008). These antecedents can be  
37 grouped into two type of resource namely human capital and physical capital. The former was  
38 workforce competences (e.g. knowledge and skills), while the latter is more related to technology,  
39 devices, and equipment used to perform tasks in organisations. The human and physical capital  
40 will be the most two precious antecedents of organisation's financial condition.  
41

42 The notion of human and physical capital as key antecedents of financial condition has  
43 been supported by a theoretical perspective. A resource theory or commonly called Resource  
44 Based Theory (RBT) uses a resource-based approach in the analysis of competitive advantages  
45 (Barney, 1991, 2001). The theory is used as a supporting theory in this study to see the effect of  
46 Human Capital and Physical Capital on regional Financial Conditions. The key to the RBT  
47 approach is a strategy of understanding the relation between valuable resources, organisation  
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1 capabilities, competitive advantage, and profitability. In the end, all those resources should  
2 particularly provide supports for maintaining the competitive advantage over time.  
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4 The theory firstly introduced by Wernerfelt (1984) in his work entitled "*A Resource-based*  
5 *View of the Firm*". However, most of the researches referred to Barney's (1991) seminal work.  
6 The firm resources explained about how to help the company in improving the efficiency and  
7 effectiveness of operations. Furthermore, the competitive advantage can be understood by  
8 instilling an understanding of the company consists of heterogeneous and immovable elements.  
9 The steps in maximizing the competitive advantage of the company should fit into the four criteria,  
10 namely *valuable, awareness, inimitability and non-substitutability*.  
11

12 According to RBT, the resources can be generally defined by including the assets,  
13 organizational processes, organizational attributes, information, or knowledge controlled by the  
14 organizations which can be used to compile and imply the strategies. Regardless the number of  
15 resources, the RBT categorizes the resources into three major types;  
16

- 17 a. Physical Capital (e.g. technology, manufacturing, and equipment)
  - 18 b. Human Capital (e.g. training, experience, insight)
  - 19 c. Organizational capital resources (e.g. formal structural)
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25 Using the framework of the RBT, both Human and Physical Capital can maintain the  
26 quality of financial condition in an organisation, this includes public organisation such as  
27 provincial governments. Human Capital would provide the organisation with desired human  
28 resources which directly influence the quality of financial condition. Financial condition needs  
29 skillful personnel and experts to secure the accountability of the reporting system, for example.  
30 The existence of these expected workforces will sustain the quality of financial condition. The  
31 same case applies for the Physical Capital, organisation with abundant fruitful tools, devices, and  
32 equipment will be more likely to exert those tools to support firm achievement as well as providing  
33 support for financial condition.  
34

35 The concept of RBT, in this case, also asserts that Human and Physical Capital are able to  
36 create an organization's competitive advantage so as to generate the incremental values for the  
37 organization. The value referred to the better performance in an organization including financial  
38 performance. Throughout the application of adequate Human Capital and supportive Physical  
39 Capital, provincial offices can provide more sufficient and complete information towards a better  
40 financial conditions (Ghozali and Chariri, 2007).  
41

42 The supports from the two resources may not always provide desired effect on financial  
43 condition due to some conditions. For instance, previous studies have documented that  
44 organisational culture (Yesil and Kaya, 2013) and gender (Campbell and Mínguez-Vera, 2008)  
45 determined financial performance. Certain cultures may hinder the implementation of supportive  
46 human and physical capital. Likewise, gender-related injustice also impede proper human capital  
47 management. It appears that there are some degree of control which may potentially influence the  
48 effect of some resources on organisation's financial achievement. It is plausible to propose that the  
49 effect of the two key resources on financial condition is presumably moderated by the level of  
50 control.  
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1 Human and Physical Capital depend on the degree of control applied by organisational  
2 management. Management Control becomes much more important in ensuring that the human and  
3 physical resources are in place to support financial condition. Anthony and Govindarajan (2005)  
4 stated that "Management control is a process by which managers influence other organizational  
5 members to imply the organizational strategies". It is also a process of detecting and correcting  
6 errors for accidental or intentional work. Since its focus is on humans and implementing plans,  
7 management control requires strong psychological considerations. Activities such as  
8 communication, advising, encouraging and criticizing are important parts of this process.  
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12 Management control utilizes task control to ensure the kind of effective and efficient work  
13 by considering three important areas namely budgeting, economic value added, and balance  
14 scorecard (Otley, 1999). Efficient describes how many inputs are needed to produce a unit of  
15 output while effectiveness is defined as the ability of a unit to achieve the desired goals. The most  
16 efficient organizational unit is the one that can produce a number of outputs with the use of  
17 minimal inputs or produce the most output with the available inputs.  
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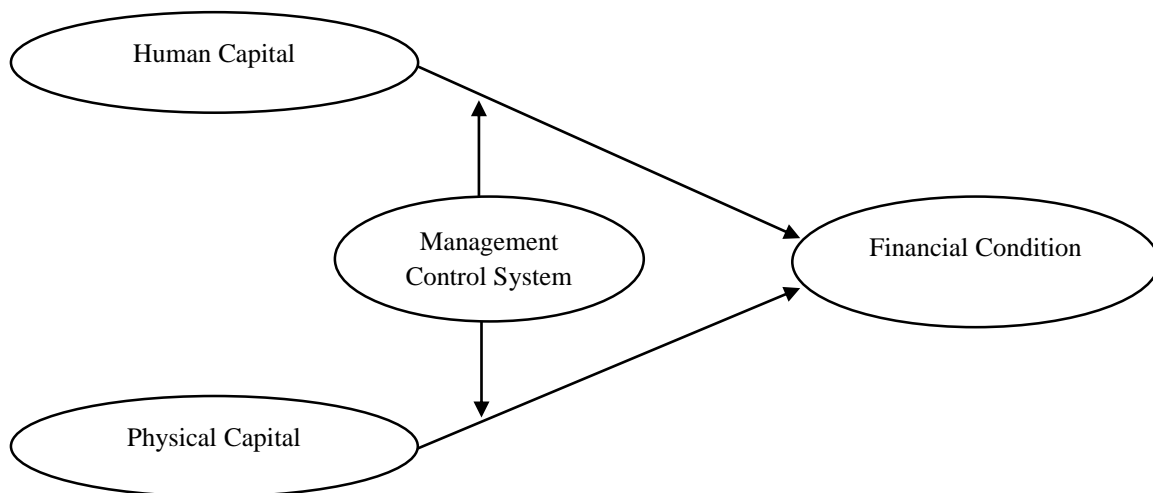
19 Control Theory of Strategic Human Resource Management (Snell, 1992) proposed that as  
20 an organisation expects certain level of performance, it must implement high degree of control  
21 over human resource management particularly when the goals and incentives are less clear. This  
22 theory also suggests that control depends on the degree of standard exhibited by organisations. As  
23 goals and incentives are less known and the cause-effect knowledge of management seems blur,  
24 high control is highly needed. Organisations may suffer from underachievement performance or  
25 serious issues related to organizational attainment.  
26

27 The same case also applies for the financial condition. Using this Control theory  
28 perspective, public sector financial condition in the regional level potentially requires some degree  
29 of control in managing Human Capital and Physical Capital. The control should start from input,  
30 behavioural, and finally outputs. Human Capital management could support financial condition  
31 when the input (e.g. recruitment and selection) is practiced with systematic control. Behavioural  
32 control is related to personnel's behaviours which also require control to direct personnel towards  
33 targeted goals. Output control means organisation, stakeholders, and employees should have a  
34 crystalized standard of desired output and this standard is deemed to guide human capital  
35 management. Thus, the higher control implemented by the organisations, the more positive the  
36 effect of Human Capital on Financial Condition.  
37

38 Physical capital also demands certain control in order to bring positive impact on financial  
39 condition. As proposed by the Control theory (Snell, 1992), clear and crystalized standard is  
40 important in developing control. Thus, certain degree of control is essential to ensure that the  
41 physical resources is utilized to supporting organisation goals. According to the theory, input,  
42 behavioural, and output control are three elements of control system. Physical Capital should also  
43 be controlled using this concept. Organisations with high degree of physical resource control  
44 would carefully consider physical input, control personnel behavior in using physical assets or  
45 resources, and physical utility output would be evaluated with caution. By implementing this  
46 system the positive effect of Physical Capital on Financial Condition will be considerably  
47 improved.  
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1 Latham and Locke (1979) also have strengthened the argument that high degree of control  
2 may cause the financial resources (i.e. human and physical capital) are even impactful. The goal-  
3 setting theory (Latham and Locke, 1979; Locke et al., 1981; Tosi et al., 1991) postulates that clear  
4 and specific goals are proven to be more effective than “do your best” goals. The goals impact  
5 organisation as the degree of clarity is high and this also apply for financial condition. Organisation  
6 could perform a better financial condition as the control over Human and Physical Capital are more  
7 standardized and crystalized. Similarly, Snell (1992) found that clear standard played important  
8 role in developing a better control system.  
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12 Given the important role of control, this study proposes a management control system to  
13 control how the strategy in the company runs according to plans and objectives. According to  
14 Purnamasari (2009) which stated that to encourage companies to be able to compete in increasingly  
15 fierce global competition, the management control is an absolute requirement that must be  
16 conducted by the professional managers. It is a process and structure which systematically  
17 arranged by management in controlling activities so that the goals and objectives set by the  
18 company can be achieved. Therefore, Management Control System will moderate the effect of  
19 Human and Physical Capital on Financial Condition.  
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Figure 1. Theoretical Framework

### **Hypotheses**

Based on this framework, a conceptual framework is developed for this research as follows:

H1: Human Capital has a positive effect on the Regional Financial Condition.

H2: Physical Capital has a positive effect on the Financial Conditions.

H3: Management Control System moderates the relation between Human Capital and Financial Conditions

### **METHOD**

1 **Participants**

2 Participants were employees of the Regional Financial and Asset Management Agency  
3 who were the Financial Report Compilation team in the Golden Triangle area of South Sulawesi.  
4 The South Sulawesi Golden Triangle region was actually formed from a path connecting three  
5 regencies and big cities (Makassar, Gowa and Maros). Participants worked as Secretary,  
6 Budgetary, Treasury, Accounting and Information Technology and Regional Assets. This study  
7 took 5 people in each field which chosen randomly so that 25 samples per region could be obtained,  
8 and amount of 75 samples were obtained from three gold triangle regions. The number of female  
9 participants were 53% and male 47% with most participants had bachelor degree (81%).  
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14 **Measures**

15 This study used scale which were developed by the researchers in accordance with the  
16 theory of each variable. There are four measuring instruments in this study. The following table  
17 describes the construction of the measure:  
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22 Table 1. *Operational Variable*

Variable	Dimension	Indicator
<i>Human Capital</i> (Mignonedan O'Neil, 2005)		Special Competence Work Experience Skill
<i>Physical Capital</i> (Baldi, 2013)		Availability of Natural Resources and the Environment Government Investation Facilities and Infrastructure (Computer and Internet Networks)
Management Control System (Prabawati, 2010)		Strategic Planning Implementation and Measurement Evaluation
Financial Condition (Dinapoli, 2011)	Environment	Community needs Population Property Value Inflation Individual income Budgeting
	Organization	Budget Cost Timeliness and accuracy of financial transactions Quality and timeliness of financial reporting
	Financial	Limitation of Debt Potential Taxes Legality of Expenditures

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57 The measures were developed in Indonesian using a 5-point Likert scale (1= Strongly  
58 Disagree to 5= Strongly Agree). The results showed that the data had four independent  
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constructs confirming the proposed theoretical model. Outer loading value indicated that the convergent validity of the data had coefficients above 0.50 for each item and the t-value for each item above 1.96. In addition, the value of Average Variance Extracted (AVE) in each construct variable was greater than 0.50. Based on the results of the analysis, all constructs fit into the convergent validity criteria. Those can be seen in the following table:

Table 2. *Average Variance Extracted (AVE)*

Variabel	AVE
Human Capital	0.617
Physical Capital	0.600
Management Control System	0.534
Financial Condition	0.702

Source: Primary data

The reliability test aims to see the composite reliability of each variable construct and also showed the appropriate value. The results suggested that the constructs had composite reliability coefficients above 0.70. So, it can be concluded that the construct had acceptable reliability.

Table 3. *Composite Reliability*

Variable	Composite Reliability
Human Capital	0.826
Physical Capital	0.818
Management Control System	0.931
Financial Condition	0.976

Source: Primary data

### ***Procedure***

The data were collected by using a questionnaire which were developed in Indonesian. Data collection was conducted using a three-wave data collection technique to avoid common method bias. In the first phase, researchers collected demographic, human capital and physical capital data. After a week, researchers then collected data for the Management Control System and the following week the Financial Condition data. Participants were asked to commit to filling out the questionnaire from the beginning to the end of the data collection which lasted for one month. All participants (75, 100%) fully participated in the study from the beginning to the end of the data collection.

## **RESULTS AND DISCUSSION**

### ***Results***

This study conducted several stages in the data analysis. First, the data were analyzed descriptively. Secondly, the relation between the variables were tested with Product Moment correlation. Lastly, the Hierarchical Moderated Regressions test was conducted.

Table 4. *Descriptive Statistics and Bivariate Correlations*

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
Human Capital	11.43	1.21						
Physical Capital	11.79	1.23	.52**					
MCS	12.12	1.15	.45**	.54**				
FC(Environment)	22.90	2.52	.53**	.56**	.73**			
FC(Institution)	12.17	1.22	.30**	.34**	.62**	.78**		
FC(Financial)	12.26	1.35	.46**	.46**	.67**	.72**	.64**	
FC Total	47.33	4.63	.50**	.53**	.76**	.86**	.87**	.85**

Note: *N*= 75, *M*= Mean, *SD*= Standard Deviation, MCS= Management Control System, FC= Financial Condition, \*\*  $p < .01$

Table 4 above showed the average values and standard deviations for each variable in the study. In addition, the relation between variables was presented in the form of product moment correlation coefficient. Based on the analysis of that relation, it was generally concluded that all variables in the study were positively and significantly correlated. The level of relation between these variables ranged from  $r = .34$  ( $p < .01$ ) to  $r = .86$  ( $p < .01$ ). The Human Capital had a fairly strong correlation with the Financial Condition ( $r = .50$ ,  $p < .01$ ) and so did the Physical Capital ( $r = .53$ ,  $p < .01$ ). The relation between the Management Control System and the Financial Condition was even stronger with the correlation coefficient which reaching  $r = .76$  ( $p < .01$ ). The results indicated that the two independent variables (i.e. Human Capital and Physical Capital) and Management Control System as moderator variables had a strong positive relation with Financial Condition.

After knowing the relation between variables, then the Hierarchical Moderated Regressions analysis was performed. The following were the results of the analysis:

Table 5. *Moderated Regressions with Financial Condition as Dependent Variable*

Model		$R^2$	<i>Adj. R</i> <sup>2</sup>	$\Delta R^2$	$\Delta F$	$\beta$
1	Human Capital	.25***	.24	-	24.81	.50***
2	Human Capital Physical Capital	.35**	.33	.10**	10.86	.31** .37**
3	Human Capital Physical Capital HC*MCS	.36**	.34	.01	1.47	.32** .37** -.12
4	Human Capital Physical Capital HC*MCS PC*MCS	.43**	.40	.06**	7.98	.33** .33** -.33** .34**

Note: *N*= 75,  $\Delta$ = change,  $\beta$ = Standardized Beta Weight, HC= Human Capital, PC= Physical Capital, \*\*\*  $p < .001$ , \*\*  $p < .01$

1 Hierarchical Regression Analysis with moderated regression was performed. This analysis  
2 technique allowed researchers to capture the incremental contribution of each variable which  
3 entered in the model. The first model, with Human Capital as the only predictor, showed a  
4 significant impact on the Financial Condition ( $Adj. R^2 = .25, p < .001$ ). In the second model,  
5 Physical Capital entered and contributed a positive and significant *added value* to the Financial  
6 Condition prediction model ( $\Delta R^2 = .10, p < .01$ ). In model 3, the interaction between Human Capital  
7 and Management Control System did not significantly increase the predicted value of the Financial  
8 Condition ( $\Delta R^2 = .01, p > .05$ ). Model 4 was the regression model that gave the highest contribution  
9 to the variance of the Financial Condition in the presence of the additional interaction variables of  
10 Physical Capital and Management Control System ( $\Delta R^2 = .06, p < .01$ ).

11 The analysis showed that the impact of Human Capital on Financial Condition was proven  
12 to be positive and significant across all regression models. When there were no other variables in  
13 the model, the impact of Human Capital on Financial Conditions tended to be strong ( $Adj. R^2 =$   
14  $.24, \beta = .50, p < .001$ ). The impact of Human Capital on Financial Conditions remained positive  
15 and significant across all the regression models, including in model 4 ( $Adj. R^2 = .40, \beta = .33, p$   
16  $< .001$ ). Based on these results, the H1 was accepted which meant the Human Capital had a positive  
17 effect on the Financial Condition.

18 The presence of Physical Capital to predict Financial Condition also had a positive impact  
19 on all regression models. In model 4, Physical Capital had the same effect as Human Capital ( $Adj.$   
20  $R^2 = .40, \beta = .33, p < .001$ ). This perceived that H2 was accepted, which meant that Physical Capital  
21 affected the Financial Condition.

22 In model 4, the interaction between Human Capital and Management Control System  
23 contributed negatively to Financial Condition ( $R^2 = .10, p < .01$ ). It meant that the impact of Human  
24 Capital on Financial Conditions depended on the high or low Management Control System ( $\beta = -$   
25  $.33, p < .01$ ). The higher the Management Control System then the lower the impact of Human  
26 Capital on Financial Conditions, and vice versa. This finding supported the research hypothesis  
27 (H3) which stated that the Management Control System moderated the relation of Human Capital  
28 to Financial Conditions.

29 The interaction between Physical Capital and Management Control System also showed a  
30 significant impact on the Financial Condition ( $\beta = .34, p < .001$ ). The impact of these interactions  
31 tended to be positive which meant that Physical Capital would increasingly have an impact on the  
32 Financial Condition when the Management Control System is high, conversely if a low  
33 Management Control System could reduce the impact of Physical Capital on the Financial  
34 Condition. These results were in accordance with the previously proposed H4.

35 The theoretical model which carried by the researcher was in accordance with empirical  
36 data which found with the suitability of the regression model up to  $R^2 = .43$  ( $p < .01$ ) which meant  
37 that the regression model could predict 43% of the variance of the Financial Condition.

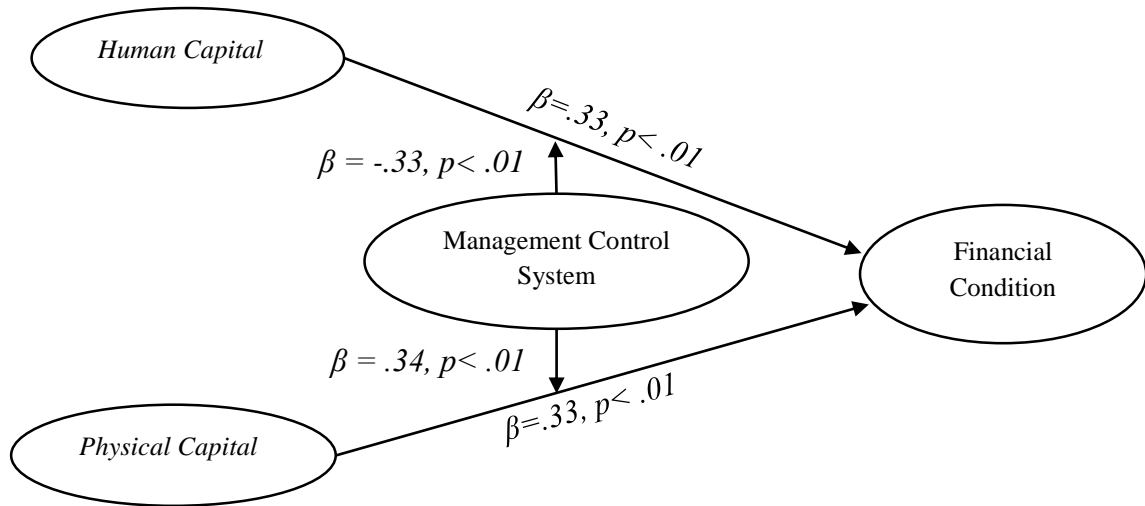


Figure 2. Empirical model and coefficients

Figure 3 below illustrates the interaction between Human Capital and Management Control Systems in predicting Financial Conditions. The graph explained that the value of the prediction model was higher when the Management Control System was at a low level ( $R^2 = .156$ ), compared to when it was at a high level ( $R^2 = .131$ ). So that the existence of a high Management Control System could reduce the impact of Human Capital on Financial Conditions.

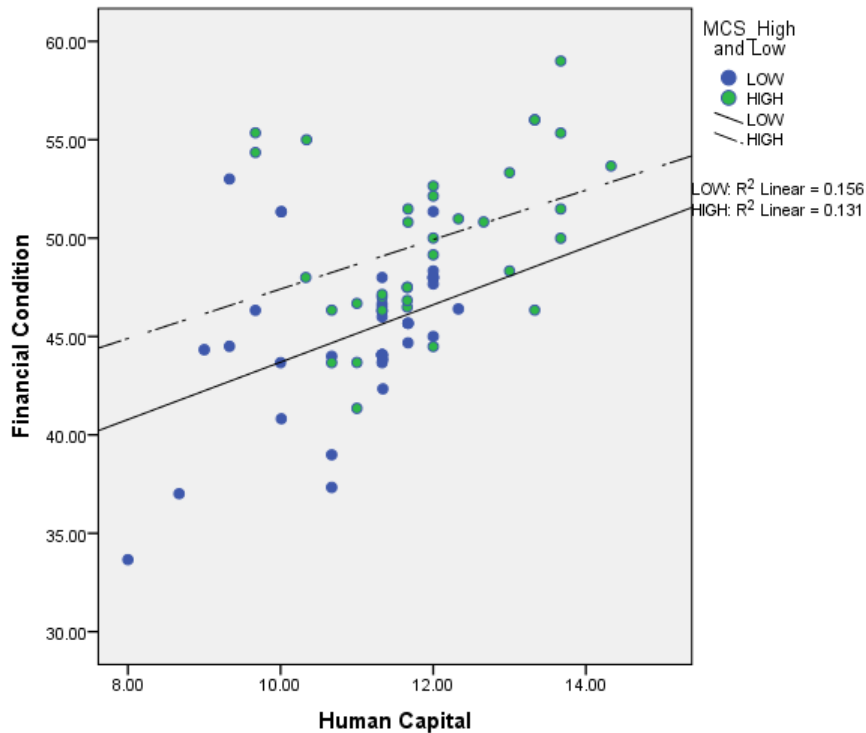


Figure 3. Interaction between Human Capital and Management Control System

The interaction between Physical Capital and Management Control System can be seen in Figure 4. Unlike the previous interactions, the interaction in figure 4 showed that the impact of

Physical Capital on Financial Conditions was stronger when the Management Control System was also at a high level ( $R^2 = 0.217$ ), compared when dealing at low levels ( $R^2 = 0.071$ ). A high Management Control System could support the positive impact of Physical Capital on Financial Conditions. The low Management Control System could result in the low impact of Physical Capital on Financial Conditions.

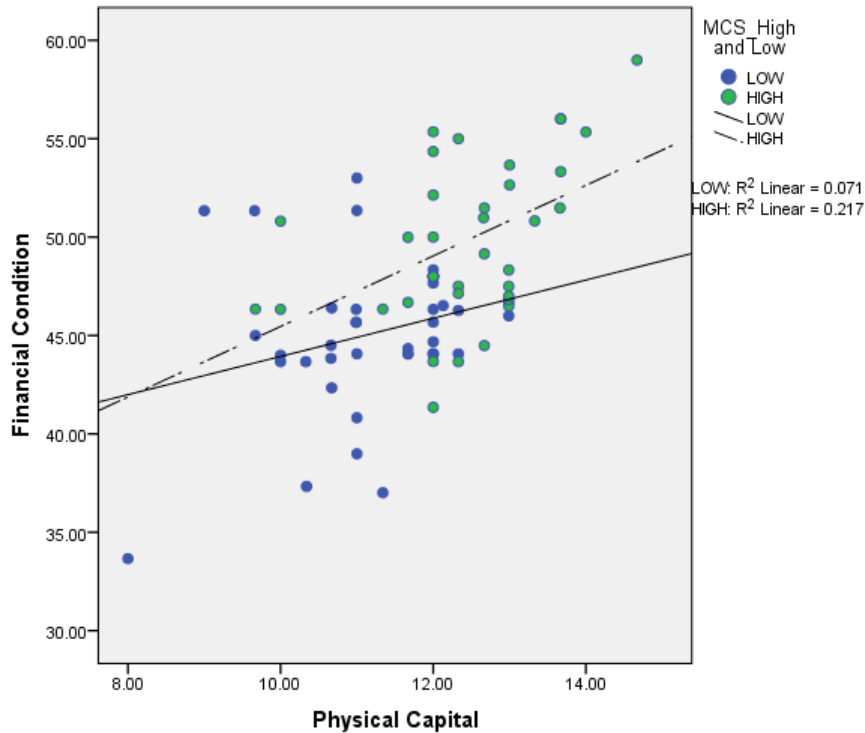


Figure 4. Interaction between Physical Capital and Management Control System

## DISCUSSION

### *The Effect of Human Capital on Financial Conditions*

The analysis showed that Human Capital had positive influence on Financial Conditions. Based on the analysis, the higher Human Capital in the terms of special competencies, work experience and skills, the more likely financial condition leverages in Makassar, Gowa and Maros. This suggests that Human Capital affects environmental, institutional, and financial conditions of these three areas. In this study, a successful financial condition referred to environment, institution and finances dimensions in three key areas of South Sulawesi (i.e. Makassar, Gowa and Maros). Firstly, within the environmental dimension there were community needs, populations, property values, inflation, individual income and budgeting, all these necessary to establish a stable financial condition. Secondly, human resources also contribute to institutional dimensions of financial performance. Human Capital aspects supports the organisation strategic in which there was availability of budget, timeliness and accuracy of financial transactions and the quality, and timeliness of financial reporting. Lastly, the workforce competence also provided supports for the financial dimension which included debt limits, tax potential and legality of expenditure. Successful financial dimension, in this regard, relied upon the workforce competence. Human capital serves a means to monitor debt limits and tax management, for example. So the increase or

1 decrease in Human Capital had an influence on the Financial Condition of the government in these  
2 regions. Similar research was also found by Zulkifli (2018), Ramli et al. (2014), Nimtrakoon  
3 (2015), Ervina et al. (2008), Is et al. (2014), which stated that Human Capital had a positive effect  
4 on Financial Conditions.  
5

6 The RBT (Barney, 1991, 2001) has explained the importance of valuable and rare resources  
7 in fostering organisation competitive advantages. Human Capital also acted as a valuable resource  
8 for organizational success which also includes financial achievement within organisation. As the  
9 organisation maintains sufficient quality of Human Capital, the workforce will strive to facilitate  
10 sustainable financial performance. Thus, according to this study, the RBT successfully explained  
11 the role of Human Capital in predicting Financial Condition.  
12

13 Special competence, work experience and skills became important points in improving  
14 Financial Conditions because with those could be an important part in improving innovation,  
15 strategies and objectives of the organization. Participants assumed that the development of human  
16 capital was also able to increase the ability of an area in improving the economy and maximizing  
17 its potential, but this study assumed that it is unable to affect the company's Financial Condition.  
18

19 This research reinforced the notion that the role of Human Capital in a government needed  
20 to be considered because the better Human Capital was able to strengthen the achievement of the  
21 objectives of an area. The fulfillment of the needs of the residents of an area could be improved  
22 with the support of good Human Capital.  
23

### 24 ***The Effect of Physical Capital on Financial Conditions***

25 The results showed that Physical Capital had a positive effect on the Financial Conditions.  
26 The level of Physical Capital in terms of the availability of natural resources and the environment,  
27 government investment, facilities and infrastructure (e.g. computers, internet access) had a  
28 significant impact on the fulfilment of the environmental, institutional, and financial sectors in the  
29 government areas of Makassar, Gowa and Maros. Physical Capital contributed positive impact on  
30 leveraging the areas' Financial Condition which also included fostering environmental,  
31 institutional, and financial aspects.  
32

33 As mentioned earlier, there are there distinct dimensions namely the environment,  
34 institutions and finances. These three aspects were applied to depict financial achievement of local  
35 government in South Sulawesi (i.e. Makassar, Gowa and Maros). In leveraging financial condition,  
36 the governments should scrutinize the community needs, populations, property values, inflation,  
37 individual income and budgeting. The second dimension was the institution in a sense that there  
38 was budget availability, timeliness and accuracy of financial transactions, and the quality and  
39 timeliness of financial reporting. The third dimension was finance which covered debt limits, tax  
40 potential and legality of expenditure.  
41

42 The RBT has supported that Physical Capital (e.g. technology) has provided valuable  
43 resources for the governmental organisations in South Sulawesi, Indonesia. The theory and  
44 previous findings have been supported by this empirical study. Physical Capital had significant  
45 positive influence on the Financial Condition of the government in these three regions; Makassar,  
46 Gowa and Maros. Barney (2001) proposed that competitive advantages of an organisation can be  
47 achieved by utilizing existing valuable and rare resources in organisation. Consistently, in the case  
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1 of local government organisations in Indonesia, it appeared that Physical Capital added significant  
2 amount of incremental variances to the development of Financial Condition. Physical assets,  
3 technologies, devices and other facilities were viewed as the essential elements of successful  
4 Financial Conditions.  
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6 This study was also in line with research conducted by Zulkifli (2018), Nimtrakoon (2015),  
7 Ervina et al. (2008), Is et al. (2014). However, the effect could be indirect as other variables also  
8 might also influence the relationship. For example, Nirvana et al. (2014) discovered that Cultural  
9 Capital moderated the Physical Capital - Financial Conditions relationship. Therefore, this study  
10 also considered testing the effect of Management Control System in moderating the effect.  
11

12 Limitations of Physical Capital were often became a problem of a local government  
13 regardless the quality of Human Capital. Generally, regions that had outstanding human capital  
14 would be more developed if juxtaposed with the availability of natural resources and the  
15 environment, adequate government investment, facilities and infrastructure (e.g. computers). It  
16 seems in this study, the participants considered that Physical Capital in a form of technologies,  
17 facilities and infrastructures provide significant supports for Financial Condition.  
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### 23 ***The Moderation Effect of Management Control System on the Relation of Human Capital and*** 24 ***Financial Condition*** 25

26 Apart for the direct effect of Human Capital on Financial Condition, this study also found  
27 that Management Control System moderated the effect of Human Capital on Financial Condition.  
28 This research was supported by the Control Theory (Snell, 1992) as the theory stated that managing  
29 human resources must be supported with input, behavioural, and output control. In addition, the  
30 Control Theory and the Goal Setting (Latham and Locke, 1979) postulated that clear and  
31 crystalized standard potentially emphasize the effect of resources. In addition, the goal setting  
32 principles have stressed enough on the importance of specific and clear goals. Say it differently,  
33 the theoretical background has assumed that a company with supportive human resources but zero  
34 goals and rules would experience constraints to rise the Financial Condition.  
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39 This study discovered an interesting findings related to the moderation effect of the  
40 Management Control System. The presence of a lower degree of Management Control System  
41 could trigger improvement in local government organisation. In contrast, high degree of  
42 Management Control System would reduce the effect of Human Capital on Financial Condition.  
43 The theories have supported that Management Control System facilitated the Human Capital –  
44 Financial Condition relationship. The moderating effect seems to be more positive as the theories  
45 suggested that clear and standardized goal of Human Capital management could improve Financial  
46 Condition. However, this study showed opposing evidence as the moderating effect was found to  
47 be negative. This indicated that the existence of Management Control System could weaken the  
48 role of Human Capital on Financial Condition.  
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53 In the local government areas, Human Capital significantly determined the fluctuation of  
54 Financial Condition. However, as the Management Control System implemented with  
55 considerably high degree of input, behavioural, and output control, Human Capital would be less  
56 influential. The Management Control System improves the Human Capital management by  
57 standardizing control over the input quality, specifying work behaviour, and directing control to  
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1 attain desired output. The government officials could have perceived Human Capital as an  
2 insignificant resource as the management of the human resources was highly controlled. Simply,  
3 the local governments could discarded the importance of Human Capital for Financial Condition  
4 as they perceived high Management Control System.  
5

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7 The results of this study were in line with the research conducted by Chandra (2017), Ong  
8 et al. (2016), Rachma (2014) where they all found that the Management Control System had a  
9 significant influence on Human Capital and Financial Conditions. However, despite the effect,  
10 scholars and government officials should consider how the Human Capital and Management  
11 Control System interact to predict Financial Condition. In terms of predicting the local government  
12 Financial Conditions, as the degree of Management Control System increases the Human Capital  
13 impact on Financial Condition declines. Thus, Organisations that have a poor Management Control  
14 System may require high quality of Human Capital.  
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### 19 ***The Moderation Effect of Management Control System on the Relation of Physical Capital and*** 20 ***Financial Condition*** 21

22 The results of this study also indicated that the Management Control System was able to  
23 moderate the effect of Physical Capital on Financial Conditions. The relation between Physical  
24 Capital and Financial Conditions is increasing as the Management Control System included in the  
25 prediction model. As predicted previously using the Control Theory by Snell (1992), high degree  
26 of control over input, behaviour, and output also improve the quality of Physical Capital. In this  
27 respect, Physical Capital could be more influential as the Management Control System ensure its  
28 quality by controlling input of physical resources, controlling behaviours in utilizing the resources,  
29 and directing the outputs of using the resources. As the Management Control System increases, it  
30 improves the effect of Physical Capital on Financial Condition.  
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35 Unlike the former moderating effect, Management Control System and Physical Capital  
36 went hand-in-hand in predicting Financial Condition. It indicated that the effect of Physical  
37 Resources on Financial Performance depended on the degree of control in organisation.  
38 Organisations with abundant of Physical Resources may not always provide high performing  
39 Financial Condition unless they implement high state of Management Control System. This shades  
40 the light on the importance of Management Control System in supporting the role of Physical  
41 Capital. Hypothetically, if the organisations tend to have less Physical Resources, managing the  
42 resources using the Management Control System principles will accentuate the effect of the  
43 resources on the organisations' Financial Condition.  
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47 The results were in line with some previous investigations conducted by Chandra (2017),  
48 Ong et al. (2016), and Rachma (2014). In those studies, Management Control System was one of  
49 predictors of Financial Performance in organisations. The effect of Management Control System  
50 is important as it serves as control over resources quality. Anthony and Govindarajan (2005) stated  
51 that Management Control System was also a process for detecting and correcting errors at work.  
52 The focus is on human behaviours and the implementation of plans. The focus on behavioural  
53 control also requires a strong psychological aspects.  
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57 In the local government organisation, the three golden areas of South Sulawesi may have  
58 relied on the level of Management Control System to attaining expected level of Financial  
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1 Condition. In this regard, the government official should strive to optimize the control over the  
2 physical resources. The control system should manage the selection of equipment, human  
3 behaviours related to the application of the equipment, and it also should monitor the effect of  
4 certain technologies or devices on outputs. Physical Capital positively predict the local government  
5 Financial Condition as far as the physical resources controlled with systematic procedure starting  
6 from input to output.  
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### 10 ***Implications***

11 This research empirically examined the influence of moderating effect of Management  
12 Control Systems on the two local government financial condition antecedents; Human and  
13 Physical Capital. The results provided supports that perceived Management Control System  
14 significantly determined the effect of Human Capital and Physical Capital on Financial Condition.  
15 However, this moderator behaved differently towards Human and Physical Capital. Management  
16 Control System tended to alter the low quality of Human Capital while at the same time strengthen  
17 the Physical Capital – Financial Condition Relationship.  
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22 In a case where the local governments implement high Management Control System, the  
23 Physical Capital will be more likely to foster Financial Condition. Unfortunately, this condition  
24 will also reduce the Human Capital effect on Financial Condition. Albeit the organisations have  
25 exhibited sufficient workforce competence, it will have less impact on the Financial Condition as  
26 the Control System is highly managed. Presumably, outstanding Human Capital can tolerate a poor  
27 Management Control System and still positively impacts Financial Condition. Control System is  
28 important for directing the effect of resources on Financial Condition. However, the local  
29 government officials, in this case, should be aware that increasing control over Human Capital can  
30 reduce the effect of human resources on Financial Condition. Human Capital in the local  
31 government areas may not have less impact on financial performance as the organisations  
32 implement high control system.  
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### 39 ***Limitations and Future Research Directions***

40 This study employed a set of questionnaire as valid and reliable measures of variables being  
41 studied. The initial attempt was to collect objective data. However, the existing objective data were  
42 not adequately standardized across different organisations. The data were also strictly prohibited  
43 for non-official parties. Likewise, researchers cannot find alternative objective data that definitely  
44 measured the level of achievement of the whole existing variables, other than the opinions of  
45 employees who work in the organization. This study, then, employed Subject Matter Experts  
46 (SMEs) perception towards each variable in the study and this procedure was supported by the  
47 authorities. Therefore, future studies can repeat this method using objective data sources from  
48 government officials by establishing mutual collaborations.  
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53 Furthermore, although this research succeeded in involving representatives from all  
54 agencies with varying levels of position, the number of participants involved was still small  
55 compared to some previous studies. By increasing the number of participants and involving more  
56 governmental organisations, the future studies would provide more information regarding the  
57 effect of control system in organisation.  
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3 **CONCLUSIONS**

4 This study has two folds. Firstly, it contributed a new information related to the effect of  
5 two key resources (i.e. Human and Physical Capital) on financial performance in governmental  
6 organisations. Secondly, this study broaden our understanding towards the unique role of  
7 Management Control System in the local government organisations in South Sulawesi, Indonesia.  
8 The first part of the findings was consistent with the RBT as both Human and Physical Capital  
9 significantly predicted Financial Condition. However, the second part of the findings was mixed  
10 as Management Control System negatively moderated the effect of Human Capital while at the  
11 same time also positively moderated the effect of Physical Capital on Financial Condition. This  
12 study highlighted the importance of improving the standard of control system in managing the  
13 local government organisations. Although it potentially reduces the effect of Human Capital, high  
14 degree of control will help organisations to maintain desired Financial Conditions.  
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KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN  
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APPROVAL NOTICE

No. 2017/UNH-4/KP.06.10/2020

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Address	:	Jl. Perintis Kemerdekaan Km. 10, Makassar
Project Title	:	Human Capital and Physical Capital in Regional Financial Condition
Project ID	:	UH.EB.005.01.03.20
Project start date	:	10 January 2020
Project end date	:	10 January 2021

The above proposed project has been **approved** based on the information given in the application and its attachments. Please inform the *Social and Behavioral Research Ethics division at Universitas Hasanuddin*, if the above research project is discontinued before the expected date of completion. In addition, you are required to report anything which might warrant review of ethical approval of the protocol, this might include:

- serious or unexpected adverse impacts on participants
- Amendments in the protocol
- Changes to the research team

Please reach the office of Research Ethics at Fakultas Ekonomi dan Bisnis, Universitas Hasanuddin if this project requires amendments or extension. Your report is due on the completion of the project.

Makassar, 05 January 2020

Dekan,



Prof. Dr. Abd. Rahman Kadir, SE., M.Si., CIPM  
Fakultas Ekonomi dan Bisnis Universitas Hasanuddin

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5 **INFORMED CONSENT**  
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8 Title of Research: Human Capital and Physical Capital in  
9 Regional Financial Condition

10 Principle Investigator, Affiliation and **Asri Usman**  
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19 Makassar, Indonesia

20  
21 1. Introduction and Purpose of the Study

22 *This study aims to investigate employees' perception about their daily work routine which*  
23 *includes their idea about their performance and experience in the workplace.*

24 2. Description of the Research

25 *In this study you will be asked to complete questionnaires. The questionnaire will come in*  
26 *three times in every two weeks. Each questionnaire will take up to 15 minutes to*  
27 *complete.*

28 3. Participation

29 *We estimate there will be 100 employees participate in this study. They will come from*  
30 *the Regional Financial and Asset Management Agency team in the Golden Triangle area*  
31 *of South Sulawesi. As a participant, you will receive a survey booklet three times every*  
32 *two weeks. Your decision to participate in this study is complete voluntary. If you decide*  
33 *to not participate in this study, it will not affect the care, services, or benefits to which*  
34 *you are entitled.*

35 4. Potential Risks and Discomforts

36 *You may experience some discomforts in filling the questionnaire. If you do not feel*  
37 *comfortable enough to answer the questions, you can stop at any point. You can withdraw*  
38 *from the study at any point and your decision will not affect your job, the care, service, or*  
39 *benefits to which you are entitled. This study and your participation will not impact your*  
40 *job or your performance report.*

41 5. Potential Benefits

42 *People who participate in this study may better understand the link between human*  
43 *resources and financial condition.*

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# Heliyon

## THE EFFECT OF HUMAN CAPITAL AND PHYSICAL CAPITAL ON REGIONAL FINANCIAL CONDITION: THE MODERATING EFFECT OF MANAGEMENT CONTROL SYSTEM

--Manuscript Draft--

<b>Manuscript Number:</b>	HELIYON-D-21-01738R2
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<b>Abstract:</b>	<p>This study examines the effect of Human Capital and Physical Capital on Regional Financial Condition with a Management Control System as moderator. Participants were employees of the Regional Financial and Asset Management Directorates located in three major cities/districts in the province of South Sulawesi, Indonesia. The participants were recruited from three different regions resulting in 75 participants in a three-wave data collection procedure. Four measures were developed (i.e. Human Capital, Physical Capital, Management Control System, and Financial Condition), which were constructively valid and reliable for research purposes. The results showed that Human Capital and Physical Capital directly influenced the Financial Condition. The effect of Human and Physical Capital was moderated by the Management Control System. Management Control System negatively moderated the effect of Human Capital while at the same time also positively moderated the effect of Physical Capital on Financial Condition. This study collected participant's perceptions towards the study variables without any further investigation to the objective measures. Although some scholars may find this as the lack of evidence against the actual Financial Condition, acknowledging experts' perceptions should provide a better understanding of the experienced Financial Condition. Various studies have investigated some factors which may affect Financial Condition. However, this study proposed an examination of the role of the Management Control System. In this case, a capital that is owned by the financial organisations cannot provide a direct impact on the Financial Condition without the role of the Management Control System.</p>
<b>Opposed Reviewers:</b>	

Dear Editor and Reviewers,

I hope this finds you well,

We are pleased to receive the decision regarding our manuscript that has been submitted to Heliyon. The manuscript has been revised, and new information has been added to improve clarity. Here we provide our responses to each comment from the reviewers:

For the first reviewer:

We valued your input and seriously considered your comments in our discussion. Here are responses to your comments:

1. For the method, it was difficult for us to find exactly the number of participants. We could only mention that the number was greater than 100 because of some conflicts of interest we were trying to avoid. Some of these employees closely work with auditors and inspectors of the regional government offices. We have tested our data using the G\*Power calculator, and the results showed enough power to reduce type II error.
2. As suggested, all coefficients have been rounded two digits after zero.
3. For the measure section, we have included model fit indices (i.e., chi-square, df, p-value, RMSEA), also compared the measurement model with other alternative models to reduce biases. The measures were self-report measures by subject matter experts (SME), and some items have been included in the measure section.
4. The reason we employed Hierarchical Moderated Regression because we wanted to compare different regression models. We were able to compare the change in  $R^2$  by using this method. We understood that Structural Equation Model could be used in this study, but it could only give us one model. At the same time, we intended to show our readers how different antecedent (e.g., human capital) could change variance in Financial Condition.
5. Our analysis also included a “mean-centred” procedure to eliminate multicollinearity. We have reported this in the revised manuscript.
6. As suggested, we have added some arguments related to the importance of Human Capital and Physical Capital. We also included some studies that previously predicted Financial Condition.
7. Previous scholars in this area have overlooked Management Control System. We aimed to tailor the role of management, human factors, and physical aspects of financial performance in an organisation. We have specified the reasons to include Management Control System as the moderating variable in this study.
8. As suggested, we reorganised the literature and hypotheses

For reviewer #2

1. We agreed that many factors within the organisation could predict financial performance. We have cited some studies that have revealed the predictors of financial performance. Human Capital and Physical Capital are two critical resources in the organisation but have received less attention from scholars in accounting or financial management studies.
2. For the method, the participants were recruited via advertisements. We did not directly communicate with potential participants to avoid the potential risk of conflicts. Many of them work as auditors and inspector for authority figures. We reached the HRD offices to communicate our study, and they helped us advertise the study and distribute the survey

booklets. The number of participants should not be an issue according to the G\*Power calculator. We also performed a “mean-centred” technique to eliminate multicollinearity. For the analysis, we initially performed CFA to evaluate our measurement model (i.e., construct validity and reliability), but we did not report the results in the original draft. We have revised the manuscript, included the CFA results, and compared our proposed theoretical model with other alternative models.

3. We preferred to report our current analysis and included measurement model analysis to support our theoretical model.
4. Thank you for your advice regarding the readability of our manuscript. We have revised and sent the manuscript for proofreading. Please do let us know if anything we could do to improve the quality of this manuscript.

# THE EFFECT OF HUMAN CAPITAL AND PHYSICAL CAPITAL ON REGIONAL FINANCIAL CONDITION: THE MODERATING EFFECT OF MANAGEMENT CONTROL SYSTEM

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## Abstract

This study ~~aims to examine~~ examines the effect of Human Capital and Physical Capital on Regional Financial Condition with a Management Control System as moderator. Participants were employees of the Regional Financial and Asset Management Directorates ~~which were~~ located in three major cities/districts in the province of South Sulawesi, Indonesia. ~~The 75 randomly selected~~ The participants were recruited from three different regions resulting in 75 participants ~~participants is involved~~ in a three-wave data collection procedure. Four measures were developed (i.e. Human Capital, Physical Capital, Management Control System, and Financial Condition) ~~which were found to be~~ which were constructively valid and reliable for research purposes. The results showed that ~~the~~ Human Capital and Physical Capital directly influenced the ~~Financial Conditions~~ Financial Condition. The effect of Human and Physical Capital ~~were was~~ moderated by the Management Control System. Management Control System negatively moderated the effect of Human Capital while at the same time also positively moderated the effect of Physical Capital on Financial Condition. This study collected participant's perceptions towards the study variables without any further investigation to the objective measures. Although, some scholars may find this as the lack of evidence against the actual ~~financial conditions~~ Financial Condition, acknowledging experts' perceptions should provide a better understanding ~~on of~~ the experienced ~~Financial condition~~ Condition. Various studies have investigated some factors which may affect ~~the Financial Conditions~~ Financial Condition. However, this study proposed an examination of the role of ~~the~~ Management Control System. In this case, a capital ~~which that~~ is owned by the financial ~~organizations organisations~~ cannot provide a direct impact on the ~~Financial Conditions~~ Financial Condition ~~if there is no~~ without the role of the Management Control System.

**Keywords:** Human Capital, Physical Capital, Management Control System, Financial Condition, and Indonesia

## INTRODUCTION

Financial Condition is determined by the ability of an area to fulfil an obligation for prospering or serving a community. In this regard~~s~~, there are three core dimensions to evaluate the

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8 ~~financial conditions~~Financial Condition they are environmental, institutional and financial  
9 dimensions (Dinapoli, 2011). These three dimensions will be interconnected to produce a  
10 ~~sufficient proper~~ Financial Condition. By fulfilling all these dimensions, the government will be  
11 able to bring more stable ~~financial conditions~~Financial Condition.

12 Firstly, the environmental dimension is the assessment of ~~Financial Conditions~~Financial  
13 ~~Condition which assessed~~based on how a government supports or impedes regulations, especially  
14 on bringing innovations to the community. Secondly, the institutional dimension is a management  
15 practice and legislative policy which guides ~~the fiscal financial~~ decision making. Its function is  
16 often as a response to ~~the~~ environmental or political factors (Dinapoli, 2011). Lastly, the financial  
17 dimension is most related to financial performance. This particular dimension includes potential  
18 tax or incomes in a particular region and a debt limit and ~~a~~ legality of expenditure from a region.  
19 For some countries, it also consists of fiscal ~~decentralization~~~~decentralisation~~ management in  
20 which each region will obtain a budget for the funds to be managed.

21  
22 One of the most important questions to this issue is, what are variables may potentially  
23 predict ~~financial conditions~~Financial Condition. Research in this area has investigated some  
24 determinants of Financial Condition and performance. In Indonesia, the type of firm, independent  
25 board, gender diversity, and location of director can determine financial distress (Kristanti *et al.*,  
26 2016). On the other hand, a study also revealed that the Capital Adequacy Ratio, Credit Interest  
27 Income, and size of the organisation or corporate had a positive effect on financial performance  
28 (Elshaday *et al.*, 2018). In some public organisations, the political system played a significant role  
29 in financial Condition (Garcia-Sanchez *et al.*, 2012). Some scholars also suggested that cost-  
30 efficiency and effective financial management could determine Financial Condition (Cuadrado-  
31 Ballesteros and Bisogno, 2019; Zafra-Gómez *et al.*, 2009, 2010). Although some predictors of  
32 financial Condition have been revealed, these studies merely focused on the system and  
33 management of financial performance. Human resources and other resources have not received  
34 much attention, even though organisations demand a certain level of resources to perform  
35 effectively.

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37 Considering the important roles of resources, the ~~Resource-Resource-Based~~ The Formatted: Indent: First line: 0.5"  
38 (Barney, 1991) supports the notion that Human Capital and Physical Capital provides significant  
39 resources for maintaining ~~sufficient financial conditions~~Financial Condition. Human capital  
40 becomes considerably important because it is a source of innovation and strategy renewal. Human  
41 Capital is related to any knowledge, skills, abilities and attitudes owned by personnel in  
42 organisations ~~which that~~ are highly supportive for ~~organizational~~~~organisational~~ success (Perrotta,  
43 2018). Further, it can be fostered from ~~an~~ applied research, management objective, reengineering  
44 process and improvement or development of workforce skills. Furthermore, ~~H~~human ~~C~~capital  
45 creates incremental values to organisations ~~on a daily basis~~~~daily~~, via motivation, commitment,  
46 competence and effectiveness of ~~the~~ teamwork. However, each ~~organization~~~~organisation~~ offers  
47 distinctive approaches ~~in managing human capital and ito managing Human Capital, which~~ also  
48 means different values (Lepak and Snell, 2002). Thus, human capital provides unique  
49 contributions to ~~F~~financial ~~condition~~~~Condition~~ based on unique approaches given by the  
50 organisations.  
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8 In addition to Human Capital, Physical Capital also adds incremental variance to the  
9 successful ~~financial conditions~~ Financial Condition. The notion of Physical Capital includes natural  
10 resources and other technological devices (Galor and Moav, 2004). The existence of Physical  
11 Capital supports the improvement of the Financial Condition of an area. To illustrate, the  
12 development of the ~~basic-primary~~ physical conditions such as sanitation, clean water, and  
13 electricity in an area will also help ~~to~~ foster the services and welfare for the community, which  
14 may later improve ~~Financial Conditions~~ Financial Condition. Physical Capital is also ~~useful~~ helpful  
15 for creating additional values to producing desired input. Thus, it is reasonable to conclude that  
16 both human and physical resources act together to influence a region financial condition.

17  
18 The direct effect of these two capitals (i.e. human and physical) may have been moderated  
19 by the level of control performed by organisations. In Indonesia, some empirical investigations  
20 conducted by Chandra (2017), ~~and Sari and Fitriani (2009) found that the management control~~  
21 ~~system was able to improve~~ Financial C and Sari and Fitriani (2009) found that the management  
22 control system improved ~~onditions~~ Financial Condition. In these two studies, Human Capital and  
23 Physical Capital directly impacted financial performance where the organisations had sufficient  
24 control over the resources. As a result, the organisations performed better and showed expected  
25 ~~financial conditions~~ Financial Condition.

26  
27 The concept of Control theory in strategic human resource management from Snell (1992)  
28 has provided ~~a~~ clear arguments on how high control facilitates the positive effect of human capital  
29 and physical capital on desired ~~financial conditions~~ Financial Condition. According to the theory,  
30 Human Capital and Physical Capital will leverage financial performance only if an organisation  
31 implement a certain degree of control over human capital inputs, behavioural controls, and desired  
32 outputs. This further suggests that possessing a management control system favours ~~the effect of~~  
33 ~~Human and Physical Capital~~ Human and Physical Capital's effect on ~~Financial~~  
34 ~~Conditions~~ Financial Condition.

35  
36 Accordingly, management control system becomes a ~~moderation~~ moderating variable in  
37 creating good Financial Condition for one particular region. In a developing country like  
38 Indonesia, the management control system is one of the ~~strongest-most vital~~ foundations of good  
39 governance (Purnomo, and Budiawan, 2014). The internal control system includes various  
40 management tools that aim to achieve a broad range of objectives. ~~In addition~~ Besides, Riawan  
41 (2016) stated that the management control system ~~is able to~~ could improve ~~the Financial Condition~~  
42 ~~of an organisaa~~ an organisation's Financial Condition. Meanwhile, Masyur (2016) postulated that  
43 local governments encounter difficulties ~~in implementing a good control system strategy~~  
44 ~~because~~ implementing a good control system strategy because of the absence of synergy between  
45 Human Capital and the control strategy. Subsequently, this made the public services became less  
46 efficient. Control becomes a crucial element to ensure that financial ~~condition~~ Condition is  
47 achieved as expected.

48  
49 ~~Management~~ The management control system consists of management control structures  
50 and processes (Halim et al., 2012). The control structure is centered on a variety of responsibility  
51 ~~centers~~, while the management control process includes budget preparation, implementation and  
52 measurement, ~~as well as~~ reporting, and analysis. In ~~the process of the management control, the~~  
53 ~~decisions are made based on the procedures and other schedules which~~ management control, the

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8 decisions are made based on the procedures and other schedules carried out repeatedly year after  
9 year. Those procedures usually start from programming. The program is translated into ~~the form~~  
10 ~~of a budget, and~~ then the company operates based on a predetermined budget, procedure and  
11 policy. The final results are then compared with the budget, after being evaluated and improved if  
12 necessary. Since the procedure is carried out repeatedly every year, then management requires a  
13 management control system to improve its performance so that the ~~company's-company's~~ goals  
14 can be achieved.

15 By applying the ~~Resource-Resource-~~Based ~~theory-Theory~~ and Control theory in Strategic  
16 Management, one should ~~be able to~~ capture that the presence of high management control will  
17 leverage the effect of human and physical capital on financial ~~condition~~Condition. However, some  
18 contextual conditions may also influence this argument. For instance, ~~Indonesia as a developing~~  
19 ~~countries implements a decentralisation policies whichas a developing country, Indonesia~~  
20 ~~implements a decentralisation policies that~~ also include financial autonomy for its provinces.  
21 Consequently, some experts and practitioners have questioned ~~about~~ some antecedents related to  
22 regional financial performance.

23 Law No. 23 of 2014 states the implementation of regional government directed to  
24 accelerate the ~~realization-realisation~~ of community welfare through improving services,  
25 empowerment, and community participation, as well as enhancing regional competitiveness by  
26 taking ~~it~~ into ~~an~~ account ~~of~~ the principles of democracy, equality, justice, and uniqueness of the  
27 area in the system of the Unitary State of the Republic of Indonesia. Regional autonomy is a part  
28 of ~~decentralization~~decentralisation. It constructs each region to have the right and obligation for  
29 regulating their ~~own~~ area but with the control of the central government and ~~in accordance~~  
30 ~~with following~~ the law. A ~~fiscal decentralization-decentralisation~~ is implemented in order to  
31 encourage several levels of government ~~which that are able to can~~ control each region. The local  
32 governments ~~in each region~~ will accommodate the aspirations of a community ~~and be obliged to~~  
33 ~~prosper the community in terms of services~~. The success of a regional autonomy is integrated with  
34 the ability of a region to manage the funds ~~that have been budgeted to its area. In addition~~Also,  
35 the local governments should ~~also~~ be able to ~~utilize-utilise~~ the resources that are already owned by the  
36 region. Therefore, the success of a regional autonomy significantly is related to the Financial  
37 Condition of the region.

38 Unfortunately, contrasting views emerged regarding ~~the effect of Human Capital and~~  
39 ~~Physeial Capital~~Human Capital and Physeial Capital's effect on ~~Financial Conditions~~Financial  
40 Condition in Indonesia. For instance, Nirwana and colleagues (2014) found that Human Capital  
41 and Physical Capital had ~~a~~ non-significant influence on ~~Financial Conditions~~Financial Condition.  
42 However, they found it emerged after intervening through the culture. ~~While~~At the same time,-  
43 Zulkifli et al. (2018) found contrasting findings where Human Capital and Physical Capital ~~had a~~  
44 ~~positive effect on~~positively affected Financial Performance. Another finding suggested that the  
45 differences were caused by the influence of Indonesia's national culture. The level of uncertainty  
46 was ~~found to be higher in Indonesia than Australia which later reduce~~higher in Indonesia than in  
47 ~~Australia, which later reduces~~ the effect of any resources on financial performance (Graham and  
48 Sathye, 2017).  
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8 Additionally, pressure from the central government has imposed some policies in  
9 managing the budget in local government. Although provincial governments had adapted a new  
10 accounting system, ~~the issue was~~ the local officials found it difficult to maintain a well-controlled  
11 and structured system (Harun and Kamase, 2012). In a similar vein, Mir and Sutiyono (2013) have  
12 discovered that the demand, supply, and ~~the quality of Indonesian's local accounting system lacked~~  
13 ~~of parity~~ quality of Indonesia's local accounting system lacked parity, which also means the  
14 financial system implemented less effective control. This, then, causes a subsequent effect on the  
15 local financial performance as ~~an~~ effective decision-making and efficient management would be  
16 difficult to implement. Thus, in this situation exhibiting an effective control in managing resources  
17 lead to better financial performance.

18 This investigation is necessary ~~in order to further understand~~ to understand further the  
19 antecedents of ~~financial conditions~~ Financial Condition and the role of effective management  
20 control. This study will also shed light on the importance of human and physical capital in  
21 developing regional financial Condition. Local governments in Indonesia may have undergone  
22 less effective control over the accounting system and failed to address the issue since their financial  
23 reports were in a category of acceptable without exceptions. Sulawesi Selatan, in this case, acted  
24 as the main gate of Eastern Indonesia, where many ~~important~~ essential businesses happens. Despite  
25 the prestigious financial ~~condition~~ Condition, this local government was imposed to implement  
26 ~~certain-particular~~ regulation from the central government. Additionally, some resources may have  
27 been used to support the financial performance. However, more empirical information is necessary  
28 to explore whether those resources influence ~~F~~ Financial condition-Condition or not.

29 Then, the theory and empirical evidence led this study to exert a management control  
30 system as its ~~moderation~~ moderating variable on observing the influence of Human Capital and  
31 Physical Capital on the ~~Financial Conditions~~ Financial Condition of the area ~~which was~~ chosen in  
32 this study. ~~A~~ Fiscal decentralization-decentralisation is a government policy to increase the ability  
33 of an area to manage its ~~own~~ region. ~~The policy will make the distance between the government~~  
34 ~~and the community will be tightened by the presence of government representatives in each region~~  
35 ~~who can take their respective policies to maximize the services to the community, with the~~  
36 ~~management of the economic resources in the region.~~ The local governments faced difficulties ~~in~~  
37 implementing effective control system strategy because they were unable to link the relationship  
38 between Human Capital and the control strategy. As ~~the a~~ results, it caused the public services  
39 became less efficient.

40 Having considered the above discussions, the research objectives are formulated as  
41 follows;

- 42 1. To examine the effect of Human Capital on Regional ~~Financial Conditions~~ Financial  
43 Condition-
- 44 2. To examine the effect of Physical Capital on Regional ~~Financial Conditions~~ Financial  
45 Condition-
- 46 3. To examine the moderating effect of the Management Control System on the effect of  
47 Human Capital and Physical Capital on Regional ~~Financial Conditions~~ Financial  
48 Condition. which are moderated by the Management Control System.

## LITERATURE REVIEW AND HYPOTHESES

The Public Sector Accounting Board (2007) defined the ~~Financial Conditions~~ Financial Condition as the health of government financial performances as indicated by their ability to fulfill the financial obligations and the service commitments to the public, creditors, employees and others. ~~While a~~ According to Dinapoli (2011), ~~the~~ Financial Condition is the ability of the local governments to comply with the expenditure budget by taking the source of local revenue, and ~~continuously continue~~ providing services to the community.

Financial factors in Nirvana et al. (2014) ~~is a financial distribution which run~~ are a financial distribution run by the financial system. The financial system seeks to ensure ~~adequate sound~~ financial judgment and ~~cover cover~~-up liquidity. ~~The Indicators of financial factors according to Dinapoli (2011) are the debt limits, the tax potential~~ According to Dinapoli (2011), ~~the indicators of financial factors are the debt limits, the tax potential,~~ and the legality of expenditure. ~~Institutional factors according to Dinapoli (2011) are management practices and the existence of policies or regulations of local governments which guarantee the implementation of the~~ according to Dinapoli (2011), ~~institutional factors are management practices and the existence of policies or regulations of local governments that guarantee the implementation of~~ healthy governance. Furthermore, the institutional indicators are the budget and financial variance, the timeliness and accuracy of financial transactions, and the quality and timeliness of financial reporting.

In addition, Dinapoli (2011) stated that the ~~Financial Conditions~~ Financial Condition are determined by a combination of government environment, institutional and financial factors. For example, when there is a decrease in ~~the~~ population ~~of a government~~, so there will be a reduction in the tax revenue (negative environmental factors), ~~but~~. ~~However~~, the government can overcome this by reducing services, ~~increasing the tax rate,~~ and striving ~~for the development of~~ to develop economic resources, which ultimately determine the Financial Condition of the local governments.

Financial ~~condition~~ Condition ~~in at~~ a regional level can be influenced by several factors such as CEO power (Daily and Johnson, 1997), environmental and operational management (Sueyoshi and Goto, 2010), and technical performance (Kristensen *et al.*, 2008). These antecedents can be grouped into two types of resource, namely human capital and physical capital. The former was workforce competencies (e.g. knowledge and skills), while the latter is more related to technology, devices, and equipment used to perform tasks in organisations. The human and physical capital will be the most two precious antecedents of ~~an~~ organisation's ~~F~~ financial condition Condition.

The notion of human and physical capital as ~~key critical~~ antecedents of financial ~~condition~~ Condition has been supported by a theoretical perspective. A resource theory or commonly called ~~Resource~~ Resource-Based Theory (RBT), uses a resource-based approach ~~in the analysis of~~ analyse competitive advantages (Barney, 1991, 2001). The theory is used as a supporting theory in this study to see the effect of Human Capital and Physical Capital on regional ~~Financial Conditions~~ Financial Condition. The key to the RBT approach is a strategy of understanding the relation between valuable resources, organisation capabilities, competitive advantage, and profitability. In the end, all those resources should particularly provide supports for maintaining the competitive advantage over time.

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8 The theory ~~firstly was first~~ introduced by Wernerfelt (1984) in his work entitled "~~A~~  
9 *Resource-based View of the Firm*". However, most of the researches referred to Barney's (1991)  
10 seminal work. The firm resources explained ~~about~~ how to help the company in improving the  
11 efficiency and effectiveness of operations. Furthermore, the competitive advantage can be  
12 understood by instilling an understanding of the company consists of heterogeneous and  
13 immovable elements. The steps in ~~maximizing maximising~~ the ~~competitive advantage of the~~  
14 ~~company should fit into the four criteria, namely valuable, awareness, inimitability~~  
15 ~~any's~~ ~~competitive advantage should fit into the four criteria: valuable, awareness, inimitability, and non-~~  
16 ~~substitutability.~~

17  
18 According to RBT, the resources can be generally defined by including the assets,  
19 ~~organizational organisational~~ processes, ~~organizational organisational~~ attributes, information, or  
20 knowledge controlled by the ~~organizations organisations which can be used to that can~~ compile and  
21 imply the strategies. Regardless ~~of~~ the number of resources, the RBT ~~cateorizes categorises~~  
22 the resources into three major types;

- 23 a. Physical Capital (e.g. technology, manufacturing, and equipment)
- 24 b. Human Capital (e.g. training, experience, insight)
- 25 c. ~~Organizational Organisational~~ capital resources (e.g. formal structural)

26  
27 Using the framework of the RBT, both Human and Physical Capital can maintain the  
28 quality of financial ~~condition Condition~~ in an organisation, ~~this includes including~~ public  
29 organisation such as provincial governments. Human Capital would provide the organisation with  
30 desired human resources, ~~which directly influenced directly influencing~~ the quality of financial  
31 ~~condition Condition~~. Financial ~~condition Condition~~ needs skillful personnel and experts to secure  
32 the accountability of the reporting system, for example. The existence of these expected  
33 workforces will sustain the quality of financial ~~condition Condition~~. The same case applies ~~for to~~  
34 ~~the~~ Physical Capital, ~~o~~. An organisation with ~~abundant ready-to-use fruitful~~ tools, devices, and  
35 equipment will be more likely to exert those tools to support ~~the firm organisation's achievement~~  
36 ~~and provide achievement as well as providing~~ support for ~~F~~financial ~~condition Condition~~.

37  
38 The concept of RBT, in this case, also asserts that Human ~~Capital~~ and Physical Capital are  
39 able to create an ~~organization's organisation's~~ competitive advantage ~~so as~~ to generate ~~the~~  
40 incremental values for the ~~organization organisation~~. The value referred to the better performance  
41 in an ~~organization organisation~~, including financial performance. Throughout the application of  
42 adequate Human Capital and supportive Physical Capital, provincial offices can provide more  
43 sufficient and complete information towards a better ~~F~~financial ~~C~~onditions (Ghozali and Chariri,  
44 2007). ~~Thus, the first two hypotheses are as follows:~~

45  
46 Hypothesis 1 (H1): Human Capital has a positive effect on the Regional Financial Condition;

47 Hypothesis H2 (H2): Physical Capital has a positive effect on Regional ~~the~~ Financial  
48 Conditions ~~Financial Condition~~;

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51 The supports from the two resources may not always provide desired effect on ~~F~~financial  
52 ~~condition Condition~~ due to some conditions. For instance, previous studies have documented that

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8 organisational culture (Yesil and Kaya, 2013) and gender (Campbell and Mínguez-Vera, 2008)  
9 determined financial performance. Certain cultures may hinder the implementation of supportive  
10 human and physical capital. Likewise, gender-related injustice also impedes ~~proper-effective~~  
11 ~~H~~human ~~C~~capital management. It appears that there ~~are-is~~ some degree of control ~~which-that~~ may  
12 potentially influence the effect of some resources on ~~an~~ organisation's financial achievement. It is  
13 plausible ~~to propose~~ that the ~~effect of the two key resources on financial condition is presumably~~  
14 ~~moderated by the level of control~~ level of control presumably moderates the two key resources'  
15 effect on Financial Condition.

16 Human Capital and Physical Capital depend on the degree of control applied by  
17 organisational management. Management Control becomes much more ~~important-critical~~ in  
18 ensuring that the human and physical resources are in place to support ~~F~~financial  
19 ~~condition~~Condition. Anthony and Govindarajan (2005) stated that "Management control is a  
20 process by which managers influence other ~~organizational-organisational~~ members to imply the  
21 ~~organizational-organisational~~ strategies". It is also a process of detecting and correcting errors  
22 for accidental or intentional work. Since its focus is on humans and implementing plans,  
23 management control requires strong psychological ~~considerations~~resources. Activities such as  
24 communication, advising, encouraging and ~~criticizing-criticising~~ are ~~important-essential~~ parts of  
25 this process.

26  
27 ~~Management control utilizes-utilises~~ task control to ensure ~~the kind of effective~~ **Formatted: Indent: First line: 0.5"**  
28 ~~and efficient work by considering three important areas namely~~ effective and efficient work by  
29 considering three critical areas: budgeting, economic ~~value-value~~-added, and balance scorecard  
30 (Otley, 1999). ~~Efficient describes how many inputs are needed to produce a unit of output while~~  
31 ~~effectiveness is defined as the ability of a unit to achieve the desired goals. The most efficient~~  
32 ~~organizational unit is the one that can produce a number of outputs with the use of minimal inputs~~  
33 ~~or produce the most output with the available inputs.~~

34  
35 Control Theory of Strategic Human Resource Management (Snell, 1992) proposed that as  
36 an organisation expects a certain level of performance, it must implement a high degree of control  
37 over human resource management, particularly when the goals and incentives are less clear. This  
38 theory also suggests that control depends on the degree of standard exhibited by organisations. As  
39 goals and incentives are less known and the cause-effect knowledge of management seems a blur,  
40 high control is highly needed. Organisations may suffer from underachievement performance or  
41 serious issues related to ~~organizational-organisational~~ attainment.

42 The same case also applies ~~for-to~~ the ~~F~~financial ~~condition~~Condition. Using this Control  
43 theory perspective, public sector financial condition ~~in-at~~ the regional level potentially requires  
44 some ~~degree-of~~ control in managing Human Capital and Physical Capital. The control should start  
45 from input, behavioural, and finally outputs. Human Capital management could support financial  
46 ~~condition-Condition~~ when the input (e.g. recruitment and selection) is ~~practiced-practised~~ with  
47 systematic control. Behavioural control is related to personnel's behaviours which also require  
48 control to direct personnel towards targeted goals. Output control means organisation,  
49 stakeholders, and employees should have a ~~crystalized-crystalised~~ standard of the desired output,  
50 and this standard is deemed to guide human capital management. Thus, the higher control  
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8 implemented by the organisations, the more positive the effect of Human Capital on Financial  
9 Condition.


10 Physical capital also demands ~~eertain-specific~~ control in order to bring a positive impact  
11 on financial ~~condition~~Condition. As proposed by the Control theory (Snell, 1992), a clear and  
12 ~~crystalized-crystalised~~ standard is ~~important-vital~~ in developing control. Thus, a certain degree of  
13 control is essential to ensure that the physical resources ~~is-are utilized-utilised~~ to supporting  
14 ~~organisation-organisational~~ goals. According to the theory, input, behavioural, and output control  
15 are three ~~elements-of-control-system~~control systems elements. Physical Capital should also be  
16 controlled using this concept. Organisations with ~~high degree of physical resource control would~~  
17 ~~carefully consider physical input, control personnel behavior in using physical assets or resources,~~  
18 ~~and physical utility output would be evaluated~~a high degree of physical resource control would  
19 ~~carefully consider physical input, control personnel behavior in using physical assets or resources~~  
20 ~~and evaluate physical utility output~~ with caution. By implementing this system, the positive effect  
21 of Physical Capital on Financial Condition will be considerably improved.

22  
23 Latham and Locke (1979) also have strengthened the argument that a high degree of control  
24 may cause the financial resources (i.e. human and physical capital) are even impactful. The goal-  
25 setting theory (Latham and Locke, 1979; Locke *et al.*, 1981; Tosi *et al.*, 1991) postulates that clear  
26 and specific goals are proven to be more effective than “do your best” goals. The goals impact  
27 organisation as the degree of clarity is high, ~~and this~~which also ~~apply-applies for-to~~ Ffinancial  
28 ~~condition~~Condition. ~~Organisation~~An organisation could perform a better Ffinancial Ccondition as  
29 the control over Human and Physical Capital are more ~~standardized-standardised~~ and  
30 ~~crystalized-crystalised~~. Similarly, Snell (1992) found that clear standard played ~~an~~ important  
31 ~~essential~~ role in developing a better control system.

32 Given the ~~important-vital~~ role of control, this study proposes a management control system  
33 to control how the strategy in the company runs according to plans and objectives. According to  
34 Purnamasari (2009) ~~which stated that~~, to encourage companies ~~to-be-able~~ to compete in  
35 increasingly fierce global competitions, ~~professional managers must perform, the m~~Management  
36 ~~control~~Control System. ~~is an absolute requirement that must be conducted by the professional~~  
37 ~~managers.~~It is a process and structure ~~which systematically arranged by management in~~  
38 ~~controlling activities so that the goals and objectives set by the company~~systematically arranged  
39 ~~by management in controlling activities so that the company's goals and objectives~~ can be  
40 achieved. Therefore, Management Control System will moderate the effect of Human ~~Capital~~ and  
41 Physical Capital on Financial Condition. ~~The last two hypotheses will be:~~

42  
43  
44 Hypothesis 3 (H3): Management Control System moderates the relationship between Human  
45 Capital and Financial ConditionsFinancial Condition

46 Hypothesis 4 (H4): Management Control System moderates the relationship between Physical  
47 Capital and Financial Condition

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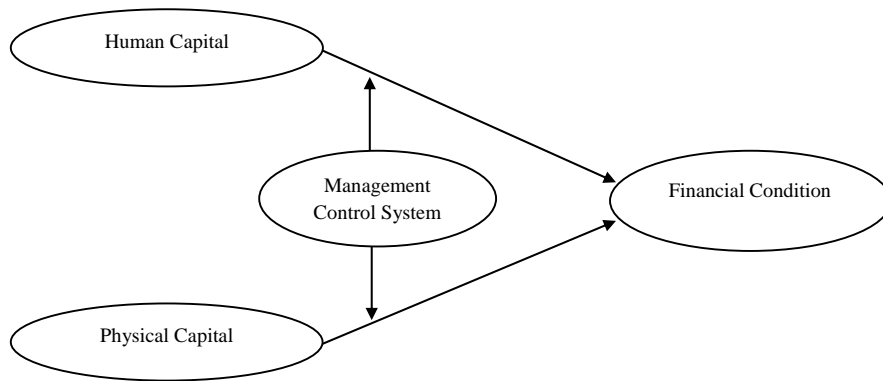


Figure 1. ~~Theoretical~~Theoretical Framework

**Hypotheses**

Based on this framework, a conceptual framework is developed for this research as follows:

- H1: Human Capital has a positive effect on the Regional Financial Condition.
- H2: Physical Capital has a positive effect on the Financial Conditions.
- H3: Management Control System moderates the relation between Human Capital and Financial Conditions.

**METHOD**

**Participants**

Participants were employees of the Regional Financial and Asset Management Agency who were served as the member of the Financial Report Compilation team in the Golden Triangle area of South Sulawesi. According to the human resource department, more than 100 employees worked in this team, and their jobs were related to financial evaluation and audit. Researchers had limited access to some information due to confidentiality reasons. The study was advertised to the three organisations, and participation was voluntary. The South Sulawesi Golden Triangle region was actually formed from a path connecting three regencies and big cities (Makassar, Gowa and Maros). Some participants worked as Secretary, Budgetary, Treasury, Accounting and Information Technology and Regional Assets. This study recruited five people in each division to obtain a sufficient sample. This study took 5 people in each field, resulting in 25 participants in each region. Since there were three regions, this study received responses from 75 participants in total, which chosen randomly so that 25 samples per region could be obtained, and amount of 75 samples were obtained from three gold triangle regions. By implementing the G\*Power analysis the number of participants ( $n= 75$ ) had enough power to eliminate the type II error (Faul et al

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2007). The number of female participants were was 53%, and male 47%, with most participants had bachelor degree (81%)s (81%) and some post-graduate degrees (19%).

### Measures

This study used scale employed measures which were developed by the researchers researchers developed in accordance with following the theory of each variable (Brislin, 1977; Hinkin et al., 1997). There are four measuring instruments in this study. The following table describes the construction of the measure:

Table 1. Operational Variable

Variable	Dimension	Indicator
Human Capital (Mignonedan O'Neil, 2005)		1. Special Competence
		2. Work Experience
		3. Skill
Physical Capital (Baldi, 2013)		1. Availability of Natural Resources and the Environment
		2. Government Investment Investment
		3. Facilities and Infrastructure (e.g., Computer and Internet Networks)
Management Control System (Prabawati, 2010)		1. Strategic Planning
		2. Implementation and Measurement
		3. Evaluation
Financial Condition (Dinapoli, 2011)	Environment	1. Community needs
		2. Population
		3. Property Value
	Organization Organisation	4. Inflation
		5. Individual income
		6. Budgeting
Financial	1. Budget Cost	
	2. Timeliness and accuracy of financial transactions	
	3. Quality and timeliness of financial reporting	
		1. Limitation of Debt
		2. Potential Taxes
		3. Legality of Expenditures

All the measures were developed in Bahasa Indonesia using a 5-point Likert-type scale (1= Strongly Disagree to 5= Strongly Agree). Human Capital Scale, Physical Capital Scale, and Management Control System Scale consisted of three items, while the Financial Condition Scale had 12 items. The items included "the organisation has many employees with special competence to accomplish challenging tasks" and "the organisation has implemented a well-designed evaluation system." The measurement model, including construct validity and reliability, was examined to provide adequate support for the measurement model.

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To test the measurement model, this study performed a Confirmatory Factor Analysis (CFA) with four measures (i.e., Human Capital, Physical Capital, Management Control System, and Financial Condition). The hypothesised model was tested against other alternative models. The fit indices confirmed that the hypothesized model showed a better fit ( $cmin/df= 1.2, p> 0.05, RMSEA= .05, and SRMR= .04$ ) than the two-predictor model where Human and Physical Capital were combined ( $cmin/df= 2, p> 0.05, RMSEA= .08, and SRMR= .08$ ) and the single-predictor model where all predictors and Management Control System were combined in the model ( $cmin/df= 4, p> 0.05, RMSEA= .09, and SRMR= .098$ ). The results showed that the data had four independent constructs confirming the proposed theoretical model. Outer loading value indicated that the convergent validity of the data had coefficients above 0.50 for each item and the  $t$ -value for each item above 1.96. In addition, the value of Average Variance Extracted (AVE) in each construct variable was greater than 0.50. Based on the results of the analysis, all constructs fit into the convergent validity criteria. Those can be seen in the following table:

Table 2. Average Variance Extracted (AVE)

Variabel	AVE
Human Capital	0.617
Physical Capital	0.600
Management Control System	0.534
Financial Condition	0.702

Source: Primary data

The reliability test aims to examine the composite reliability of each variable measurement construct and also showed the appropriate value. The results suggested that the constructs had composite reliability coefficients above 0.70 (see table 3), confirming that all the constructs had acceptable reliability.

Table 3. Composite Reliability

Variable	Composite Reliability
Human Capital	0.826
Physical Capital	0.818
Management Control System	0.931
Financial Condition	0.976

Source: Primary data

### Procedure

This research was part of a larger research program conducted by the regional financial institution. The data were collected by using a questionnaire which were developed in Indonesian. Data collection was conducted using a three-wave data collection technique to avoid common method biases (MacKenzie and Podsakoff, 2012). The survey booklets were delivered to the Human Resource Department (HRD) Office, and the HRD personnel sent the booklets to the

potential participants. In the first phase, researchers collected demographic, human capital and physical capital data. After a week, researchers then collected data for the Management Control System and the following week the Financial Condition data. Participants were asked to commit to filling out complete the questionnaire from the beginning to the end of the data collection, which lasted for one month. All participants ( $n=75$ , 100%) fully participated in the study from the beginning to the end of the data collection.

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## RESULTS AND DISCUSSION

### Results

This study conducted several stages in the data analysis. First, the data were analyzed analyzed descriptively using descriptive statistics and the bivariate correlation technique. Secondly, the relationship between the variables were tested with using Pearson Product-moment correlation. Lastly, the Hierarchical Moderated Regressions test (Anderson, 1986) was conducted to answer hypotheses.

Table 4. Descriptive Statistics and Bivariate Correlations

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
Human Capital	11.43	1.21	=					
Physical Capital	11.79	1.23	.52**	=				
MCS	12.12	1.15	.45**	.54**	=			
FC(Environment)	22.90	2.52	.53**	.56**	.73**	=		
FC(Institution)	12.17	1.22	.30**	.34**	.62**	.78**	=	
FC(Financial)	12.26	1.35	.46**	.46**	.67**	.72**	.64**	=
FC Total	47.33	4.63	.50**	.53**	.76**	.86**	.87**	.85**

Note:  $N=75$ ,  $M$ = Mean,  $SD$ = Standard Deviation, MCS= Management Control System, FC= Financial Condition, \*\*  $p<.01$

Table 4 above showed the the average values means and standard deviations for each variable in the study. In addition, the relationship between variables was presented in the form of product moment correlation coefficient. Based on the analysis of that relation, it was generally concluded that Generally, all variables in the study were positively and significantly correlated. The level of relation between these variables ranged from  $r=.34$  ( $p<.01$ ) to  $r=.86$  ( $p<.01$ ). The Human Capital had a fairly strong correlation with the Financial Condition ( $r=.50$ ,  $p<.01$ ), and so did the Physical Capital ( $r=.53$ ,  $p<.01$ ). The relation between the Management Control System and the Financial Condition was even stronger with the correlation coefficient which reaching of  $r=.76$  ( $p<.01$ ). The results indicated that the two independent variables (i.e. Human Capital and Physical Capital) and Management Control System as moderator variables had a strong positive relationship with Financial Condition.

After knowing the relation between variables performing the descriptive statistics and bivariate correlation, then the Hierarchical Moderated Regressions analysis was performed. In this study, the regression technique was considered appropriate to examine the contribution of each

predictor in different regression models (de Jong, 1999). The following were the results of the analysis:

Tabel 5. *Moderated Regressions with Financial Condition as Dependent Variable*

Model		$R^2$	Adj. $R^2$	$\Delta R^2$	$\Delta F$	$\beta$
1	Human Capital	.25***	.24	-	24.81	.50***
2	Human Capital	.35**	.33	.10**	10.86	.31**
	Physical Capital					.37**
3	Human Capital	.36**	.34	.01	1.47	.32**
	Physical Capital					.37**
	HC*MCS					-.12
4	Human Capital	.43**	.40	.06**	7.98	.33**
	Physical Capital					.33**
	HC*MCS					-.33**
	PC*MCS					.34**

Note:  $N=75$ ,  $\Delta$ = change,  $\beta$ = Standardized Beta Weight, HC= Human Capital, PC= Physical Capital, \*\*\* $p<.001$ , \*\* $p<.01$

~~Hierarchical Regression Analysis with moderated regression was performed.~~ This analysis technique allowed researchers to capture the incremental contribution of each predictor variable which entered in the models. Before running the analysis, all predictors and the moderating variable were mean-centred to eliminate the risk of multicollinearity (Hayes, 2013). The first model, with Human Capital as the only predictor, With Human Capital as the only predictor, the first model showed a significant impact on the Financial Condition ( $Adj. R^2 = .25, p < .001$ ). In the second model, Physical Capital was entered entered, and it contributed a positive and significant added value to the Financial Condition prediction model ( $\Delta R^2 = .10, p < .01$ ). In model 3, t interaction between Human Capital and Management Control System did not significantly increase the predicted value the variance of the Financial Condition ( $\Delta R^2 = .01, p > .05$ ). Model 4 was the regression model that gave the highest contribution to the variance of the Financial Condition in the presence of the additional interaction variables of Physical Capital and Management Control System ( $\Delta R^2 = .06, p < .01$ ). In model 4, all predictors and the two interactions significant predicted Financial Condition. However, the interaction between Human Capital and Management Control System contributed a negative effect on Financial Condition.

The analysis showed that the impact of Human Capital on ~~Financial Condition~~ Financial Condition was ~~proven to be~~ positive and significant across all regression models. When there were no other variables in the model, the impact of Human Capital on ~~Financial Conditions~~ Financial Condition tended to be strong ( $Adj. R^2 = .24, \beta = .50, p < .001$ ). The impact of Human Capital ~~Financial Conditions~~ Financial Condition remained positive and significant across all the regression models, including in model 4 ( $Adj. R^2 = .40, \beta = .33, p < .001$ ). Based on these results ~~the H1 was accepted which meant the~~ Human Capital had a positive effect on the ~~Financial Condition~~ Financial Condition, which provided support for H1.

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The presence of Physical Capital to predict ~~Financial Condition~~ Financial Condition also had a positive impact on all regression models. In model 4, Physical Capital had the same effect as Human Capital (Adj.  $R^2 = .40$ ,  $\beta = .33$ ,  $p < .001$ ). ~~This perceived that H2 was accepted, which meant that Physical Capital affected the Financial Condition~~ The results also provided support for H2.

In model 4, the interaction between Human Capital and Management Control System contributed negatively to ~~Financial Condition~~ Financial Condition ( $\beta = -.33$ ,  $p < .01$ ) ( $R^2 = .10$ ,  $p < .01$ ). ~~It meant that the impact of Human Capital on Financial Conditions~~ Financial Condition depended on the high or low level of the Management Control System ( $\beta = .33$ ,  $p < .01$ ). The high the Management Control System ~~then~~, the lower the impact of Human Capital on ~~Financial Conditions~~ Financial Condition, and vice versa. This finding supported ~~the research hypothesis (H3)~~ H3 which ~~stated that~~ the Management Control System moderated the relationship of ~~between~~ Human Capital ~~to and~~ Financial Conditions Financial Condition. However, one should note that Management Control System could weaken the effect of Human Capital on Financial Condition.

The interaction between Physical Capital and Management Control System also ~~showed~~ showed significant impact ~~on~~ significantly impacted the ~~Financial Condition~~ Financial Condition ( $\beta = .34$ ,  $p < .001$ ). The impact of ~~this~~ these interactions ~~tended to be~~ was positive ~~which meant~~, indicating the effect of Physical Capital ~~would increasingly have an impact on the~~ Financial Condition Financial Condition would increase when the Management Control System ~~is~~ was high. ~~Conversely~~, if a low Management Control System could reduce the impact of Physical Capital on the ~~Financial Condition~~ Financial Condition. ~~These results were in accordance with~~ provided support for the previously proposed H4.

The theoretical model which carried by the researcher was in accordance with ~~empirical data which found with the suitability of the regression model up to~~ The last regression model (model 4) showed  $R^2 = .43$  ( $p < .01$ ), which meant that the regression model could ~~predict~~ the model explained 43% of the variance ~~of in the~~ Financial Condition Financial Condition. ~~The finding considerably explained a large portion of~~ Financial Condition in the organisations.

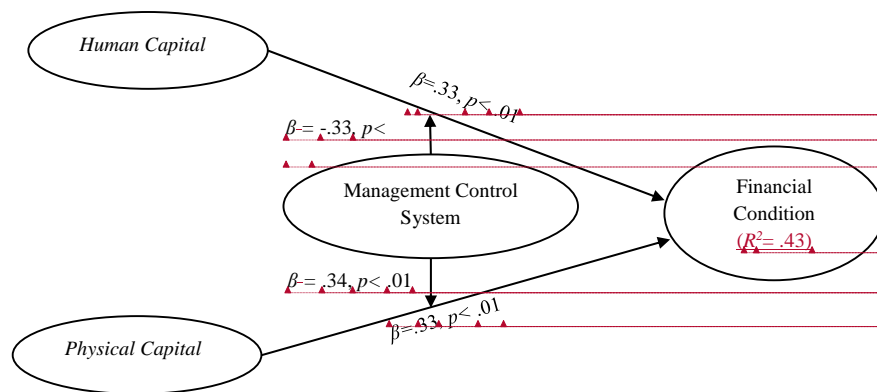


Figure 2. Empirical model and coefficients

Figure 3 below illustrates the interaction between Human Capital and Management Control Systems in predicting Financial Condition. The graph explained that the value of the prediction model was higher when the Management Control System was at a low level ( $R^2 = .156$ ), compared to when it was at a high level ( $R^2 = .131$ ). So that the existence of a high Management Control System could reduce the impact of Human Capital on Financial Condition.

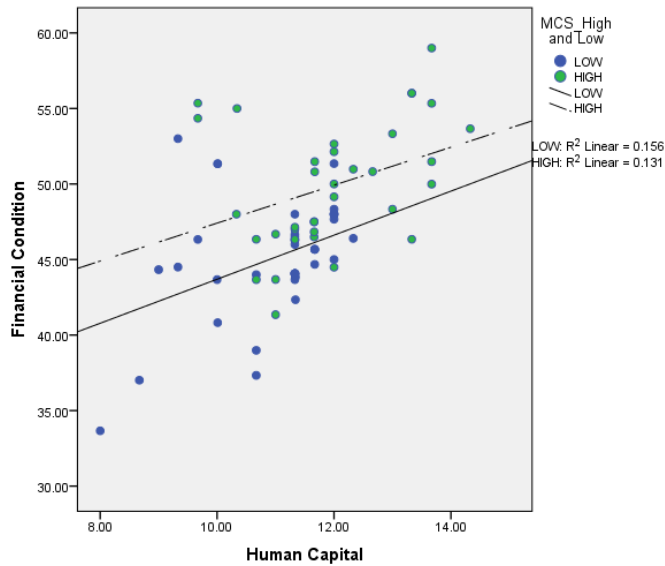


Figure 3. Interaction between Human Capital and Management Control System

The interaction between Physical Capital and Management Control System can be seen in Figure 4. Unlike the previous interaction models, the interaction in figure 4 showed that the impact of Physical Capital on Financial Condition was stronger when the Management Control System was also at a high level ( $R^2 = .22-17$ ), compared when dealing compared to low levels ( $R^2 = .074$ ). A high Management Control System could support the positive impact of Physical Capital on Financial Condition. The low Management Control System could result in the low impact of Physical Capital on Financial Conditions.

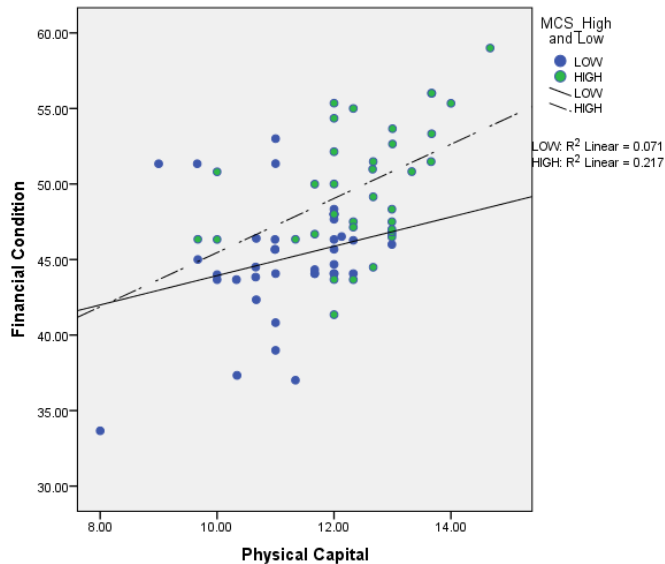


Figure 4. Interaction between Physical Capital and Management Control System

## DISCUSSION

### *The Effect of Human Capital on Financial Condition*

The analysis showed that Human Capital had a positive influence on Financial Condition. Based on the analysis, the higher Human Capital in the terms of special (e.g., competencies, work experience and skills), the more likely Financial Condition leverages in Makassar, Gowa and Maros the golden triangle areas. This suggests that Human Capital affects environmental, institutional, and Financial Conditions of these three areas. In this study, a successful financial condition referred to the environment, institution and financials dimensions in three key areas of South Sulawesi (i.e. Makassar, Gowa and Maros).

Firstly, within the environmental dimension ~~there were community needs, population~~ property values, inflation, individual income and budgeting, all these, there were community needs, populations, property values, inflation, individual income, and budgeting, all of which were necessary to establish a stable financial condition. Secondly, human resources also contribute to institutional ~~dimensions of~~ financial performance. Human Capital aspects supports ~~the organisation strategic in which there was availability of budget, timeliness and accuracy of financial transactions and the~~ the organisation strategy, including the availability of budget, timeliness and accuracy of financial transactions, quality, and timeliness of financial reporting. Lastly, the workforce competence also ~~provided supports for~~ supports the financial dimension, ~~which included~~ including debt limits, tax potential and legality of expenditure. Successful financial dimension, in this regard, relied upon the workforce competence. Human capital serves as a means to monitor debt limits and tax management, for example. ~~So~~ The increase

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8 (or decrease) in Human Capital ~~had will influence~~ ~~an influence on~~ the regional Financial  
9 Condition~~Financial Condition~~ of the government in these regions. Similar research was also  
10 ~~found~~ This notion has been previously supported by Zulkifli (2018), Ramli et al. (2014),  
11 Nimtrakoon (2015), Ervina et al. (2008), Is et al. (2014), ~~which stated that Human Capital had a~~  
12 ~~positive effect on Financial Conditions.~~

13 The RBT (Barney, 1991, 2001) has explained the importance of valuable and rare resources  
14 in fostering organisation competitive advantages. Human Capital also acted as a valuable resource  
15 for ~~organizational-organisational~~ success ~~which also includes, including~~ financial achievement  
16 within the organisation. As the organisation maintains sufficient quality of Human Capital, the  
17 workforce will strive to facilitate sustainable financial performance. Thus, according to this study,  
18 the RBT successfully explained the role of Human Capital in predicting Financial  
19 Condition~~Financial Condition~~.

20  
21 Special competence, work experience ~~and skills became important points in improving~~  
22 ~~Financial Conditions because with those could be an important part in improving innovation,~~  
23 ~~strategies and objectives of the organization, and skills became important points in improving~~  
24 ~~Financial Condition because those could be an essential part of improving the organisation's~~  
25 ~~innovation, strategies, and objectives. In this study, P~~participants ~~perceived~~assumed that the  
26 development of Hhuman Ccapital ~~was also able to increase~~ the ability of an area in improving  
27 ~~the economy and maximizing regional government's ability to improve the economy and maximise~~  
28 ~~its potential, but this study assumed that it is unable to affect the company's Financial Condition.~~

29 ~~—~~This research ~~reinforced the notion~~ postulated that the role of Human Capital in  
30 regional government needed to be reconsidered because ~~the better~~ Human Capital ~~was able to can~~  
31 strengthen the achievement of the objectives goal attainment of a an area regional government. ~~The~~  
32 ~~fulfillment of the needs of the residents of an area could be improved with the support of good~~  
33 ~~Human Capital.~~

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### 34 35 36 ***The Effect of Physical Capital on Financial ConditionsFinancial Condition***

37 The results showed that Physical Capital had a positive effect on ~~the Financial~~  
38 Conditions~~Financial Condition~~. The level of Physical Capital in terms of the availability of natural  
39 resources and the environment, government investment, facilities and infrastructure (e.g.  
40 computers, internet access) had a significant impact on ~~the fulfilment of the environmental,~~  
41 ~~institutional, and financial sectors in the government areas of Makassar, Gowa and Maros~~ Financial  
42 Condition in the three regional areas. Physical Capital contributed positive ~~impact only to~~  
43 ~~leveraging the areas' Financial Condition~~ Financial Condition, ~~which also included~~including  
44 fostering environmental, institutional, and financial aspects.

45 As mentioned earlier, there are ~~three~~ here distinct dimensions of Financial Condition,  
46 namely the environment, institutions and finances. These three ~~aspects~~ dimensions were applied  
47 ~~to depict the financial achievement of local government~~ local government's financial performance  
48 in South Sulawesi (i.e. Makassar, Gowa and Maros). In ~~leveraging-improving F~~financial  
49 ~~condition~~ Condition, the regional governments should serutinize take into account the community  
50 needs, populations, property values, inflation, individual income and budgeting. The second  
51 dimension was the institution, which covers in a sense that there was budget availability, timeliness  
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8 and accuracy of financial transactions, and the quality and timeliness of financial reporting. The  
9 third dimension was finance which covered debt limits, tax potential and legality of expenditure.

10 The RBT has supported that Physical Capital (e.g. technology) has provided valuable  
11 resources for the governmental organisations in South Sulawesi, Indonesia. ~~The theory and~~  
12 ~~previous findings have been supported by this empirical study~~ empirical study has supported the  
13 theory and previous findings. Physical Capital had ~~significant positive influence on the Financial~~  
14 ~~Condition of the government~~ a significant positive influence on the regional government's  
15 Financial Condition in these three regions: ~~Makassar, Gowa and Maros~~. Barney (2001) proposed  
16 that the competitive advantages of an organisation can be achieved by ~~utilizing~~ utilising existing  
17 valuable and rare resources in the organisation. Consistently, in the case of local government  
18 organisations in Indonesia, it appeared that Physical Capital added a significant amount of  
19 incremental variances to the development of ~~Financial Condition~~ Financial Condition. Physical  
20 assets, technologies, devices and other facilities were viewed as the essential elements of a  
21 successful ~~Financial Conditions~~ Financial Condition.

22 This study was also in line with research conducted by Zulkifli (2018), Nimtrakoon (2015),  
23 Ervina et al. (2008), Is et al. (2014). However, the effect could be indirect as other variables ~~also~~  
24 might ~~also~~ influence the relationship. For example, Nirvana et al. (2014) discovered that Cultural  
25 Capital moderated the Physical Capital - ~~Financial Conditions~~ Financial Condition relationship.  
26 Therefore, this study also considered testing the moderating effect of the Management Control  
27 System in ~~moderating the effect~~ the relationship.

28 Limitations of Physical Capital ~~were~~ often became a problem of a local government  
29 regardless of the quality of Human Capital. Generally, regions ~~that had with~~ outstanding H  
30 Capital would be more developed if juxtaposed with the availability of natural resources and the  
31 environment, adequate government investment, facilities and infrastructure ~~(e.g. computers)~~. In  
32 this study, ~~It seems in this study, the p~~ participants considered that Physical Capital ~~in a form of~~  
33 ~~technologies, facilities and infrastructures provide significant supports, in the form of~~  
34 ~~technologies, facilities, and infrastructures, provided significant support for the region's~~ Financial  
35 Condition Financial Condition.

### 36 37 38 39 ***The Moderation Effect of Management Control System on the Relation of Human Capital and*** 40 ***Financial Condition*** Financial Condition

41 Apart ~~for~~ from the direct effect of Human Capital on ~~Financial Condition~~ Financial  
42 Condition, this study also found that Management Control System moderated the effect of Human  
43 Capital on ~~Financial Condition~~ Financial Condition. This research was supported by the Control  
44 Theory (Snell, 1992) as the theory stated that managing human resources must be supported with  
45 input, behavioural, and output control. In addition, the Control Theory and the Goal Setting  
46 (Latham and Locke, 1979) postulated that clear and ~~erystalized~~ crystalised standard potentially  
47 ~~emphasize~~ emphasise the effect of resources. ~~In addition~~ Besides, the ~~goal~~ goal-setting principles  
48 have stressed enough ~~on~~ the importance of specific and clear goals. ~~Say it differently,~~ These  
49 ~~theories have~~ theoretical background has assumed supported the notion that organisations ~~a~~  
50 ~~company~~ with supportive human resources but ~~zero~~ unspecified goals and rules would experience  
51 constraints to rise their ~~Financial Condition~~ Financial Condition.

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8 This study discovered ~~an~~ interesting findings related to the moderation effect of the  
9 Management Control System. The presence of a lower degree of Management Control System  
10 could trigger improvement in local government organisation. In contrast, a high degree of  
11 Management Control System would reduce the effect of Human Capital on ~~Financial~~  
12 ~~Condition~~Financial Condition. The theories have supported that Management Control System  
13 facilitated the Human Capital – ~~Financial-Condition~~Financial Condition relationship. The  
14 moderating effect seems to be more positive as the theories suggested that a clear and ~~standardized~~  
15 ~~specific goal of Human Capital~~in human resource management could improve ~~Financial~~  
16 ~~Condition~~Financial Condition. However, this study showed opposing evidence as the moderating  
17 effect was found to be negative. This indicated that the existence of a Management Control System  
18 could weaken the role of Human Capital on ~~Financial-Condition~~Financial Condition.

19  
20 In the local government areas, Human Capital significantly determined the fluctuation of  
21 ~~Financial-Condition~~Financial Condition. However, as the Management Control System  
22 implemented with a considerably high degree of input, behavioural, and output control, Human  
23 Capital would be less influential. The Management Control System improves ~~the~~ Human Capital  
24 management by ~~standardizing~~standardising control over the input quality, specifying work  
25 behaviour, and directing control to attain desired output. The government officials could have  
26 perceived Human Capital as an insignificant resource as the ~~management of the human~~  
27 ~~resources~~human resources management was highly controlled. ~~Simply, {~~The local-regional  
28 governments could have discarded the importance of Human Capital for ~~Financial~~  
29 ~~Condition~~Financial Condition as they perceived a high Management Control System.

30  
31 The results of this study were in line with the research conducted by Chandra (2017), Ong  
32 et al. (2016), Rachma (2014), where they all found that the Management Control System had a  
33 significant influence on Human Capital and ~~Financial-Conditions~~Financial Condition. However,  
34 ~~despite the effect, scholars and government officials should consider how the Human Capital and~~  
35 ~~Management Control System interact to predict Financial-Conditions~~scholars and government  
36 officials should consider how the Human Capital and Management Control System interact to  
37 predict Financial Condition. In terms of predicting the local government Financial-Conditions,  
38 as the degree of Management Control System increases the Human Capital impact on Financial  
39 Condition declinesAs the Management Control System increases, the Human Capital impact on  
40 Financial Condition declines. Thus, Organisations that have a poor Management Control System  
41 may require high quality of Human Capitalorganisations with a flawed Management Control  
42 System may require high quality of Human Capital to improve financial conditions.

#### 43 44 ***The Moderation Effect of Management Control System on the Relation of Physical Capital and*** 45 ***Financial-Condition***Financial Condition

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47 ~~The results of~~ this study also indicated that the Management Control System ~~was able to~~  
48 ~~moderate~~moderated the effect of Physical Capital on ~~Financial-Conditions~~Financial Condition.  
49 The relation between Physical Capital and ~~Financial-Conditions~~Financial Condition ~~is increasing~~  
50 ~~as the Management Control System~~increased as the Management Control System was  
51 included in the prediction model. As predicted previously using the Control Theory by Snell (1992), a high  
52 degree of control over input, behaviour, and output ~~also improved~~d the quality of Physical Capital.

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8 In this respect, Physical Capital could be more influential as the Management Control System  
9 ensured its quality by controlling input of physical resources, controlling behaviours in ~~utilizing~~  
10 ~~utilising~~ the resources, and directing the outputs of ~~using the~~ resources. ~~This study suggested that~~  
11 ~~As~~ the Management Control System increases, it improves the effect of Physical Capital on  
12 ~~Financial Condition~~~~Financial Condition~~.

13 Unlike the former moderating effect, Management Control System and Physical Capital  
14 went hand-in-hand in predicting ~~Financial Condition~~~~Financial Condition~~. It indicated that ~~the~~  
15 ~~effect of the effect of~~ Physical ~~Resources~~ ~~Capital~~ on Financial ~~Performance~~ ~~Condition~~ depended  
16 on the degree of ~~the control~~ ~~system in within the~~ organisation. Organisations with abundant ~~of~~  
17 ~~Physical Resources~~ ~~may not always provide high performing~~ ~~Financial Condition~~ ~~unless they~~  
18 ~~implement high state of Management Control S~~ ~~Physical Capital may not always lead to high~~  
19 ~~performing Financial Condition unless they implement a favourable Management Control System.~~  
20 This ~~shades-sheds~~the light on the importance of ~~the~~ Management Control System in ~~supporting~~  
21 ~~facilitating~~ the role of Physical Capital. Hypothetically, if the organisations ~~tend-aim~~ to have ~~less~~  
22 ~~fewer p~~Physical ~~r~~Resources, managing the resources using the Management Control System  
23 principles will accentuate the effect of the resources on the organisations' ~~Financial~~  
24 ~~Condition~~~~Financial Condition~~.

25 The results were in line with some previous investigations conducted by Chandra (2017),  
26 Ong et al. (2016), and Rachma (2014). In those studies, Management Control System was one of  
27 ~~the~~ predictors of Financial Performance in organisations. The ~~effect of Management Control~~  
28 ~~System~~~~Management Control System's effect~~ is ~~important-vital~~ as it serves as control over resources  
29 ~~availability and~~ quality. Anthony and Govindarajan (2005) stated that Management Control  
30 System was also a process for detecting and correcting errors at work. ~~The focus is on human~~  
31 ~~behaviours and the implementation of plans. The focus on behavioural control also requires a~~  
32 ~~strong psychological aspects.~~

33 In the ~~local-regional~~ government ~~organisation~~~~offices~~, the three golden areas of South  
34 Sulawesi may have relied on the ~~level of Management Control System to attaining~~~~Management~~  
35 ~~Control System to attain an~~ expected level of ~~Financial Condition~~~~Financial Condition~~. In this  
36 regard, the ~~regional~~ government ~~official~~ should strive to ~~optimize-optimise the~~ control over the  
37 physical resources. The control system should manage the selection of equipment, human  
38 behaviours related to the application of the equipment; and ~~it also should~~ monitor the effect~~iveness~~  
39 of ~~certain-specific~~ technologies or devices on outputs. Physical Capital positively predicts the ~~local~~  
40 ~~regional~~ government ~~Financial Condition~~~~Financial Condition~~ as far as the physical resources  
41 controlled with systematic procedure starting from input to output.

#### 42 *Implications*

43 This research empirically examined the influence of moderating effect of Management  
44 Control Systems on the two ~~antecedents of the local-government~~~~regional financial~~  
45 ~~condition~~~~Financial Condition-antecedents~~; Human ~~Capital~~ and Physical Capital. The results  
46 ~~provided-supports~~~~supported~~ that ~~the~~ perceived Management Control System significantly  
47 determined ~~the effect of Human Capital and Physical Capital~~~~Human Capital and Physical Capital's~~  
48 ~~effect~~ on ~~Financial Condition~~~~Financial Condition~~. However, this moderator behaved differently  
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8 towards Human and Physical Capital in the regional government organisations. Management  
9 Control System tended to alter the low quality of Human Capital while at the same time strengthen  
10 the Physical Capital – ~~Financial Condition~~Financial Condition Relationship.

11 ~~In a case where~~ the ~~local regional~~ governments implement a high Management Control  
12 System, the Physical Capital will be more likely to foster ~~Financial Condition~~Financial Condition.  
13 Unfortunately, this condition will also reduce the Human Capital's effect on ~~Financial~~  
14 ~~Condition~~Financial Condition. Albeit the organisations have exhibited sufficient workforce  
15 competence, it will have less impact on the ~~Financial Condition~~Financial Condition as the Control  
16 System is highly managed. Presumably, outstanding Human Capital can tolerate a ~~poor-flawed~~  
17 Management Control System and still positively impacts ~~Financial Condition~~Financial Condition.  
18 Control System is ~~important-vital~~ for directing the effect of resources on ~~Financial~~  
19 ~~Condition~~Financial Condition. However, ~~the local government officials, in this case, in this case,~~  
20 the local government officials should be aware that increasing control over Human Capital can  
21 reduce the effect of human resources on ~~Financial Condition~~Financial Condition. Human Capital  
22 in the local government areas may not ~~have less impact on~~impact financial performance as the  
23 organisations implement high control system.  
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#### 26 ***Limitations and Future Research Directions***

27 This study employed a set of questionnaire as valid and reliable measures of variables being  
28 studied. The initial attempt was to collect objective data. However, the existing objective data were  
29 not adequately ~~standardized-standardised~~ across different organisations. ~~The data~~Accessing the  
30 data and information related to the objective financial record were was also strictly prohibited ~~for~~  
31 ~~non-official parties~~. Likewise, researchers cannot find alternative objective data that ~~definitely~~  
32 measured the level of achievement of the whole existing variables, other than the ~~opinions~~  
33 perception of employees who work in the ~~organization~~organisations. This study, then, ~~employed~~  
34 used Subject Matter Experts (SMEs) perception ~~towards of~~ each variable, ~~in the study and this~~  
35 procedure was supported by the authorities~~this procedure had been permitted by the research ethics~~  
36 committees and the government officials. Therefore, future studies can repeat this method using  
37 objective data sources from government officials by establishing mutual collaborations.  
38

39 Furthermore, although this research succeeded in involving representatives from all  
40 agencies with varying ~~levels of position, the number of participants involved was still small~~  
41 ~~compared to some~~positions, the number of participants involved was still small compared to  
42 previous studies. By increasing the number of participants and involving more governmental  
43 organisations, ~~the~~ future studies would provide more information regarding the effect of ~~the~~  
44 control system in the regional government organisations.  
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#### 46 **CONCLUSIONS**

47 This study has two folds. Firstly, it contributed ~~a~~ new information ~~related to about~~ the effect  
48 of two key resources (i.e. Human and Physical Capital) on financial performance in governmental  
49 organisations. Secondly, this study broadens our understanding ~~towards of~~ the unique role of ~~the~~  
50 Management Control System in the local government organisations in South Sulawesi, Indonesia.  
51 The first part of the findings was consistent with the RBT as both Human and Physical Capital  
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significantly predicted ~~Financial Condition~~Financial Condition. However, the second part of the findings was mixed as Management Control System negatively moderated the effect of Human Capital while at the same time also positively moderated the effect of Physical Capital on ~~Financial Condition~~Financial Condition. This study highlighted the importance of improving the standard of the control system in managing the local government organisations. Although it potentially reduces ~~the effect of Human Capital, high degree of control will help organisations to~~Human Capital's effect, a high degree of control will help organisations maintain and improve ~~desired~~desirable ~~Financial Conditions~~Financial Condition.

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KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN  
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APPROVAL NOTICE

No. 2017/LIN4-4/KP.06.10/2020

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Project Title	:	Human Capital and Physical Capital in Regional Financial Condition
Project ID	:	UH.EB.005.01.03.20
Project start date	:	10 January 2020
Project end date	:	10 January 2021

The above proposed project has been **approved** based on the information given in the application and its attachments. Please inform the *Social and Behavioral Research Ethics division at Universitas Hasanuddin*, if the above research project is discontinued before the expected date of completion. In addition, you are required to report anything which might warrant review of ethical approval of the protocol, this might include:

- serious or unexpected adverse impacts on participants
- Amendments in the protocol
- Changes to the research team

Please reach the office of Research Ethics at Fakultas Ekonomi dan Bisnis, Universitas Hasanuddin if this project requires amendments or extension. Your report is due on the completion of the project.

Makassar, 05 January 2020

Dekan,



Prof. Dr. Abd. Rahman Kadir, SE., M.Si., CIPM  
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11 **INFORMED CONSENT**  
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13 Title of Research: Human Capital and Physical Capital in  
14 Regional Financial Condition  
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22 Makassar, Indonesia

- 23 1. Introduction and Purpose of the Study  
*This study aims to investigate employees' perception about their daily work routine which  
24 includes their idea about their performance and experience in the workplace.*
- 25 2. Description of the Research  
*In this study you will be asked to complete questionnaires. The questionnaire will come in  
26 three times in every two weeks. Each questionnaire will take up to 15 minutes to  
27 complete.*
- 28 3. Participation  
*We estimate there will be 100 employees participate in this study. They will come from  
29 the Regional Financial and Asset Management Agency team in the Golden Triangle area  
30 of South Sulawesi. As a participant, you will receive a survey booklet three times every  
31 two weeks. Your decision to participate in this study is complete voluntary. If you decide  
32 to not participate in this study, it will not affect the care, services, or benefits to which  
33 you are entitled.*
- 34 4. Potential Risks and Discomforts  
*You may experience some discomforts in filling the questionnaire. If you do not feel  
35 comfortable enough to answer the questions, you can stop at any point. You can withdraw  
36 from the study at any point and your decision will not affect your job, the care, service, or  
37 benefits to which you are entitled. This study and your participation will not impact your  
38 job or your performance report.*
- 39 5. Potential Benefits  
*People who participate in this study may better understand the link between human  
40 resources and financial condition.*

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# Heliyon

## THE EFFECT OF HUMAN CAPITAL AND PHYSICAL CAPITAL ON REGIONAL FINANCIAL CONDITION: THE MODERATING EFFECT OF MANAGEMENT CONTROL SYSTEM

--Manuscript Draft--

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<b>First Author:</b>	Asri Usman
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<b>Abstract:</b>	<p>This study examines the effect of Human Capital and Physical Capital on Regional Financial Condition with a Management Control System as moderator. Participants were employees of the Regional Financial and Asset Management Directorates located in three major cities in the province of South Sulawesi, Indonesia. The participants were recruited from three different regions resulting in 75 participants in a three-wave data collection procedure. Four measures were developed (i.e. Human Capital, Physical Capital, Management Control System, and Financial Condition), which were constructively valid and reliable for research purposes. The results showed that Human Capital and Physical Capital directly influenced the Financial Condition. The effect of Human and Physical Capital was moderated by the Management Control System. Management Control System negatively moderated the effect of Human Capital while at the same time also positively moderated the effect of Physical Capital on Financial Condition. This study collected participant's perceptions towards the study variables without any further investigation to the objective measures. Although some scholars may find this as the lack of evidence against the actual Financial Condition, acknowledging experts' perceptions should provide a better understanding of the experienced Financial Condition. Various studies have investigated some factors which may affect Financial Condition. However, this study proposed an examination of the role of the Management Control System. In this case, a capital that is owned by the financial organisations cannot provide a direct impact on the Financial Condition without the role of the Management Control System.</p>
<b>Opposed Reviewers:</b>	

Dear Editor and Reviewers,

I hope this finds you well,

We are pleased to receive the decision regarding our manuscript that has been submitted to Heliyon. We have removed the track-changes and added some information regarding research ethich (i.e., inform consent and research ethic committee). Please let us know if anything we should do to expedite the publication process.

Regards,  
Asri Usman

# THE EFFECT OF HUMAN CAPITAL AND PHYSICAL CAPITAL ON REGIONAL FINANCIAL CONDITION: THE MODERATING EFFECT OF MANAGEMENT CONTROL SYSTEM

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## Abstract

This study examines the effect of Human Capital and Physical Capital on Regional Financial Condition with a Management Control System as moderator. Participants were employees of the Regional Financial and Asset Management Directorates located in three major cities in the province of South Sulawesi, Indonesia. The participants were recruited from three different regions resulting in 75 participants in a three-wave data collection procedure. Four measures were developed (i.e. Human Capital, Physical Capital, Management Control System, and Financial Condition), which were constructively valid and reliable for research purposes. The results showed that Human Capital and Physical Capital directly influenced the Financial Condition. The effect of Human and Physical Capital was moderated by the Management Control System. Management Control System negatively moderated the effect of Human Capital while at the same time also positively moderated the effect of Physical Capital on Financial Condition. This study collected participant's perceptions towards the study variables without any further investigation to the objective measures. Although some scholars may find this as the lack of evidence against the actual Financial Condition, acknowledging experts' perceptions should provide a better understanding of the experienced Financial Condition. Various studies have investigated some factors which may affect Financial Condition. However, this study proposed an examination of the role of the Management Control System. In this case, a capital that is owned by the financial organisations cannot provide a direct impact on the Financial Condition without the role of the Management Control System.

**Keywords:** Human Capital, Physical Capital, Management Control System, Financial Condition, and Indonesia

## INTRODUCTION

Financial Condition is determined by the ability of an area to fulfil an obligation for prospering or serving a community. In this regard, there are three core dimensions to evaluate the Financial Condition they are environmental, institutional and financial dimensions (Dinapoli, 2011). These three dimensions will be interconnected to produce a proper Financial Condition. By

1 fulfilling all these dimensions, the government will be able to bring more stable Financial  
2 Condition.  
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4 Firstly, the environmental dimension is the assessment of Financial Condition based on  
5 how a government supports or impedes regulations, especially on bringing innovations to the  
6 community. Secondly, the institutional dimension is a management practice and legislative policy  
7 which guides financial decision making. Its function is often as a response to environmental or  
8 political factors (Dinapoli, 2011). Lastly, the financial dimension is most related to financial  
9 performance. This particular dimension includes potential tax or incomes in a particular region  
10 and a debt limit and legality of expenditure from a region. For some countries, it also consists of  
11 fiscal decentralisation management in which each region will obtain a budget for the funds to be  
12 managed.  
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16 One of the most important questions to this issue is that what are variables may potentially  
17 predict Financial Condition. Research in this area has investigated some determinants of Financial  
18 Condition and performance. In Indonesia, the type of firm, independent board, gender diversity,  
19 and location of director can determine financial distress (Kristanti *et al.*, 2016). On the other hand,  
20 a study also revealed that the Capital Adequacy Ratio, Credit Interest Income, and size of the  
21 organisation or corporate had a positive effect on financial performance (Elshaday *et al.*, 2018). In  
22 some public organisations, the political system played a significant role in financial Condition  
23 (Garcia-Sanchez *et al.*, 2012). Some scholars also suggested that cost-efficiency and effective  
24 financial management could determine Financial Condition (Cuadrado-Ballesteros and Bisogno,  
25 2019; Zafra-Gómez *et al.*, 2009, 2010). Although some predictors of financial Condition have been  
26 revealed, these studies merely focused on the system and management of financial performance.  
27 Human resources and other resources have not received much attention, even though organisations  
28 demand a certain level of resources to perform effectively.  
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35 Considering the important roles of resources, the Resource-Based Theory (Barney, 1991)  
36 supports the notion that Human Capital and Physical Capital provides significant resources for  
37 maintaining Financial Condition. Human capital becomes considerably important because it is a  
38 source of innovation and strategy renewal. Human Capital is related to any knowledge, skills,  
39 abilities and attitudes owned by personnel in organisations that are highly supportive for  
40 organisational success (Perrotta, 2018). Further, it can be fostered from applied research,  
41 management objective, reengineering process and improvement or development of workforce  
42 skills. Furthermore, Human Capital creates incremental values to organisations daily via  
43 motivation, commitment, competence and effectiveness of teamwork. However, each organisation  
44 offers distinctive approaches to managing Human Capital, which also means different values  
45 (Lepak and Snell, 2002). Thus, human capital provides unique contributions to Financial Condition  
46 based on unique approaches given by the organisations.  
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51 In addition to Human Capital, Physical Capital also adds incremental variance to the  
52 successful Financial Condition. The notion of Physical Capital includes natural resources and other  
53 technological devices (Galor and Moav, 2004). The existence of Physical Capital supports the  
54 improvement of the Financial Condition of an area. To illustrate, the development of the primary  
55 physical conditions such as sanitation, clean water, and electricity in an area will also help foster  
56 the services and welfare for the community, which may later improve Financial Condition.  
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1 Physical Capital is also helpful for creating additional values to producing desired input. Thus, it  
2 is reasonable to conclude that both human and physical resources act together to influence a region  
3 financial condition.  
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5 The direct effect of these two capitals (i.e. human and physical) may have been moderated  
6 by the level of control performed by the organisations. In Indonesia, some empirical investigations  
7 conducted by Chandra (2017) and Sari and Fitriani (2009) found that the management control  
8 system improved Financial Condition. In these two studies, Human Capital and Physical Capital  
9 directly impacted financial performance where the organisations had sufficient control over the  
10 resources. As a result, the organisations performed better and showed expected Financial  
11 Condition.  
12

13 The concept of Control theory in strategic human resource management from Snell (1992)  
14 has provided a clear argument on how high control facilitates the positive effect of human capital  
15 and physical capital on desired Financial Condition. According to the theory, Human Capital and  
16 Physical Capital will leverage financial performance only if an organisation implement a certain  
17 degree of control over human capital inputs, behavioural controls, and desired outputs. This further  
18 suggests that possessing a management control system favours Human and Physical Capital's  
19 effect on Financial Condition.  
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21 Accordingly, management control system becomes a moderating variable in creating good  
22 Financial Condition for one particular region. In a developing country like Indonesia, the  
23 management control system is one of the most vital foundations of good governance (Purnomo,  
24 and Budiawan, 2014). The internal control system includes various management tools that aim to  
25 achieve a broad range of objectives. Besides, Riawan (2016) stated that the management control  
26 system could improve an organisation's Financial Condition. Meanwhile, Masyur (2016)  
27 postulated that local governments encounter difficulties implementing a good control system  
28 strategy because of the absence of synergy between Human Capital and the control strategy.  
29 Subsequently, this made the public services became less efficient. Control becomes a crucial  
30 element to ensure that Financial Condition is achieved as expected.  
31

32 The management control system consists of management control structures and processes  
33 (Halim et al., 2012). The control structure is centred on a variety of responsibility, while the  
34 management control process includes budget preparation, implementation and measurement,  
35 reporting, and analysis. In management control, the decisions are made based on the procedures  
36 and other schedules carried out repeatedly year after year. Those procedures usually start from  
37 programming. The program is translated into a budget, and then the company operates based on a  
38 predetermined budget, procedure and policy. The final results are then compared with the budget  
39 after being evaluated and improved if necessary. Since the procedure is carried out repeatedly  
40 every year, then management requires a management control system to improve its performance  
41 so that the company's goals can be achieved.  
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43 By applying the Resource-Based Theory and Control theory in Strategic Management, one  
44 should capture that the presence of high management control will leverage the effect of human and  
45 physical capital on financial Condition. However, some contextual conditions may also influence  
46 this argument. For instance, as a developing country, Indonesia implements a desentralisation  
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1 policies that also include financial autonomy for its provinces. Consequently, some experts and  
2 practitioners have questioned some antecedents related to regional financial performance.  
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4 Law No. 23 of 2014 states the implementation of regional government directed to  
5 accelerate the realisation of community welfare through improving services, empowerment, and  
6 community participation, as well as enhancing regional competitiveness by taking into account the  
7 principles of democracy, equality, justice, and uniqueness of the area in the system of the Unitary  
8 State of the Republic of Indonesia. Regional autonomy is a part of decentralisation. It constructs  
9 each region to have the right and obligation for regulating their area but with the control of the  
10 central government and following the law. Fiscal decentralisation is implemented in order to  
11 encourage several levels of government that can control each region. The local governments will  
12 accommodate the aspirations of a community. The success of regional autonomy is integrated with  
13 the ability of a region to manage the funds. Also, the local governments should be able to utilise  
14 the resources that are already owned by the region. Therefore, the success of a regional autonomy  
15 significantly is related to the Financial Condition of the region.  
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21 Unfortunately, contrasting views emerged regarding Human Capital and Physical Capital's  
22 effect on Financial Condition in Indonesia. For instance, Nirwana and colleagues (2014) found  
23 that Human Capital and Physical Capital had a non-significant influence on Financial Condition.  
24 However, they found it emerged after intervening through the culture. At the same time, Zulkifli  
25 et al. (2018) found contrasting findings where Human Capital and Physical Capital positively  
26 affected Financial Performance. Another finding suggested that the differences were caused by the  
27 influence of Indonesia's national culture. The level of uncertainty was higher in Indonesia than in  
28 Australia, which later reduces any resources on financial performance (Graham and Sathye, 2017).  
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32 Additionally, pressure from the central government has imposed some policies in  
33 managing the budget in local government. Although provincial governments had adapted a new  
34 accounting system, the local officials found it difficult to maintain a well-controlled and structured  
35 system (Harun and Kamase, 2012). In a similar vein, Mir and Sutiyono (2013) have discovered  
36 that the demand, supply, and quality of Indonesia's local accounting system lacked parity, which  
37 also means the financial system implemented less effective control. This, then, causes a subsequent  
38 effect on the local financial performance as effective decision-making and efficient management  
39 would be difficult to implement. Thus, in this situation exhibiting an effective control in managing  
40 resources lead to better financial performance.  
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45 This investigation is necessary to understand further the antecedents of Financial Condition  
46 and the role of effective management control. This study will also shed light on the importance of  
47 human and physical capital in developing regional financial Condition. Local governments in  
48 Indonesia may have undergone less effective control over the accounting system and failed to  
49 address the issue since their financial reports were in a category of acceptable without exceptions.  
50 Sulawesi Selatan, in this case, acted as the main gate of Eastern Indonesia, where many essential  
51 businesses happen. Despite the prestigious Financial Condition, this local government was  
52 imposed to implement regulation from the central government. Additionally, some resources may  
53 have been used to support the financial performance. However, more empirical information is  
54 necessary to explore whether those resources influence Financial Condition or not.  
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1 Then, the theory and empirical evidence led this study to exert a management control  
2 system as its moderating variable on observing the influence of Human Capital and Physical  
3 Capital on the Financial Condition of the area chosen in this study. Fiscal decentralisation is a  
4 government policy to increase the ability of an area to manage its region. The local governments  
5 faced difficulties implementing effective control system strategy because they were unable to link  
6 the relationship between Human Capital and the control strategy. As a result, it caused the public  
7 services became less efficient.  
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10 Having considered the above discussions, the research objectives are formulated as  
11 follows;  
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- 13 1. To examine the effect of Human Capital on Regional Financial Condition
- 14 2. To examine the effect of Physical Capital on Regional Financial Condition
- 15 3. To examine the moderating effect of the Management Control System on the effect of  
16 Human Capital and Physical Capital on Regional Financial Condition.  
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## 21 **LITERATURE REVIEW AND HYPOTHESES**

22 The Public Sector Accounting Board (2007) defined the Financial Condition as the health  
23 of government financial performance indicated by their ability to fulfil the financial obligations  
24 and the service commitments to the public, creditors, employees and others. According to Dinapoli  
25 (2011), Financial Condition is the ability of the local governments to comply with the expenditure  
26 budget by taking the source of local revenue and continue providing services to the community.  
27

28 Financial factors in Nirvana et al. (2014) are a financial distribution run by the financial  
29 system. The financial system seeks to ensure sound financial judgment and cover-up liquidity.  
30 According to Dinapoli (2011), the indicators of financial factors are the debt limits, the tax  
31 potential, and the legality of expenditure. According to Dinapoli (2011), institutional factors are  
32 management practices and the existence of policies or regulations of local governments that  
33 guarantee the implementation of healthy governance. Furthermore, the institutional indicators are  
34 the budget and financial variance, the timeliness and accuracy of financial transactions, and the  
35 quality and timeliness of financial reporting.  
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37 In addition, Dinapoli (2011) stated that the Financial Condition are determined by a  
38 combination of government environment, institutional and financial factors. For example, when  
39 there is a decrease in the population, so there will be a reduction in the tax revenue (negative  
40 environmental factors). However, the government can overcome this by reducing services,  
41 increasing the tax rate, and striving to develop economic resources, which ultimately determine  
42 the Financial Condition of the local governments.  
43

44 Financial Condition at a regional level can be influenced by several factors such as CEO  
45 power (Daily and Johnson, 1997), environmental and operational management (Sueyoshi and  
46 Goto, 2010), and technical performance (Kristensen *et al.*, 2008). These antecedents can be  
47 grouped into two types of resource, namely human capital and physical capital. The former was  
48 workforce competencies (e.g. knowledge and skills), while the latter is more related to technology,  
49 devices, and equipment used to perform tasks in organisations. The human and physical capital  
50 will be the most two precious antecedents of an organisation's Financial Condition.  
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1 The notion of human and physical capital as critical antecedents of financial Condition has  
2 been supported by a theoretical perspective. A resource theory or commonly called Resource-  
3 Based Theory (RBT), uses a resource-based approach to analyse competitive advantages (Barney,  
4 1991, 2001). The theory is used as a supporting theory in this study to see the effect of Human  
5 Capital and Physical Capital on regional Financial Condition. The key to the RBT approach is a  
6 strategy of understanding the relation between valuable resources, organisation capabilities,  
7 competitive advantage, and profitability. In the end, all those resources should particularly provide  
8 supports for maintaining the competitive advantage over time.

9 The theory was first introduced by Wernerfelt (1984) in his work entitled “A *Resource-*  
10 *based View of the Firm*”. However, most of the researches referred to Barney’s (1991) seminal  
11 work. The firm resources explained how to help the company in improving the efficiency and  
12 effectiveness of operations. Furthermore, the competitive advantage can be understood by  
13 instilling an understanding of the company consists of heterogeneous and immovable elements.  
14 The steps in maximising the company’s competitive advantage should fit into the four criteria:  
15 valuable, awareness, inimitability, and non-substitutability.

16 According to RBT, the resources can be generally defined by including the assets,  
17 organisational processes, organisational attributes, information, or knowledge controlled by the  
18 organisations that can compile and imply the strategies. Regardless of the number of resources,  
19 the RBT categorises the resources into three major types;

- 20 a. Physical Capital (e.g. technology, manufacturing, and equipment)
- 21 b. Human Capital (e.g. training, experience, insight)
- 22 c. Organisational capital resources (e.g. formal structural)

23 Using the framework of the RBT, both Human and Physical Capital can maintain the  
24 quality of Financial Condition in an organisation, including public organisation such as provincial  
25 governments. Human Capital would provide the organisation with desired human resources,  
26 directly influencing the quality of Financial Condition. Financial Condition needs skilful personnel  
27 and experts to secure the accountability of the reporting system, for example. The existence of  
28 these expected workforces will sustain the quality of Financial Condition. The same case applies  
29 to Physical Capital. An organisation with ready-to-use tools, devices, and equipment will be more  
30 likely to exert those tools to support the organisation’s achievement and provide support for  
31 Financial Condition.

32 The concept of RBT, in this case, also asserts that Human Capital and Physical Capital are  
33 able to create an organisation’s competitive advantage to generate incremental values for the  
34 organisation. The value referred to the better performance in an organisation, including financial  
35 performance. Throughout the application of adequate Human Capital and supportive Physical  
36 Capital, provincial offices can provide more sufficient and complete information towards better  
37 Financial Conditions (Ghozali and Chariri, 2007). Thus, the first two hypotheses are as follows:

38 Hypothesis 1 (H1): Human Capital has a positive effect on the Regional Financial Condition

39 Hypothesis 2 (H2): Physical Capital has a positive effect on Regional Financial Condition

1 The supports from the two resources may not always provide desired effect on Financial  
2 Condition due to some conditions. For instance, previous studies have documented that  
3 organisational culture (Yesil and Kaya, 2013) and gender (Campbell and Mínguez-Vera, 2008)  
4 determined financial performance. Certain cultures may hinder the implementation of supportive  
5 human and physical capital. Likewise, gender-related injustice also impedes effective Human  
6 Capital management. It appears that there is some degree of control that may potentially influence  
7 the effect of some resources on an organisation's financial achievement. It is plausible that the  
8 level of control presumably moderates the two key resources' effect on Financial Condition.  
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12 Human Capital and Physical Capital depend on the degree of control applied by  
13 organisational management. Management Control becomes much more critical in ensuring that  
14 the human and physical resources are in place to support Financial Condition. Anthony and  
15 Govindarajan (2005) stated that "Management control is a process by which managers influence  
16 other organisational members to imply the organisational strategies". It is also a process of  
17 detecting and correcting errors for accidental or intentional work. Since its focus is on humans and  
18 implementing plans, management control requires strong psychological resources. Activities such  
19 as communication, advising, encouraging and criticising are essential parts of this process.  
20 Management control utilises task control to ensure effective and efficient work by considering  
21 three critical areas: budgeting, economic value-added, and balance scorecard (Otley, 1999).  
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25 Control Theory of Strategic Human Resource Management (Snell, 1992) proposed that as  
26 an organisation expects a certain level of performance, it must implement a high degree of control  
27 over human resource management, particularly when the goals and incentives are less clear. This  
28 theory also suggests that control depends on the degree of standard exhibited by organisations. As  
29 goals and incentives are less known and the cause-effect knowledge of management seems a blur,  
30 high control is highly needed. Organisations may suffer from underachievement performance or  
31 serious issues related to organisational attainment.  
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36 The same case also applies to the Financial Condition. Using this Control theory  
37 perspective, public sector financial condition at the regional level potentially requires some control  
38 in managing Human Capital and Physical Capital. The control should start from input, behavioural,  
39 and finally outputs. Human Capital management could support financial Condition when the input  
40 (e.g. recruitment and selection) is practised with systematic control. Behavioural control is related  
41 to personnel's behaviours which also require control to direct personnel towards targeted goals.  
42 Output control means organisation, stakeholders, and employees should have a crystalised  
43 standard of the desired output, and this standard is deemed to guide human capital management.  
44 Thus, the higher control implemented by the organisations, the more positive the effect of Human  
45 Capital on Financial Condition.  
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50 Physical capital also demands specific control in order to bring a positive impact on  
51 Financial Condition. As proposed by the Control theory (Snell, 1992), a clear and crystalised  
52 standard is vital in developing control. Thus, a certain degree of control is essential to ensure that  
53 the physical resources are utilised to attain organisational goals. According to the theory, input,  
54 behavioural, and output control are three control systems elements. Physical Capital should also  
55 be controlled using this concept. Organisations with a high degree of physical resource control  
56 would carefully consider physical input, control personnel behavior in using physical assets or  
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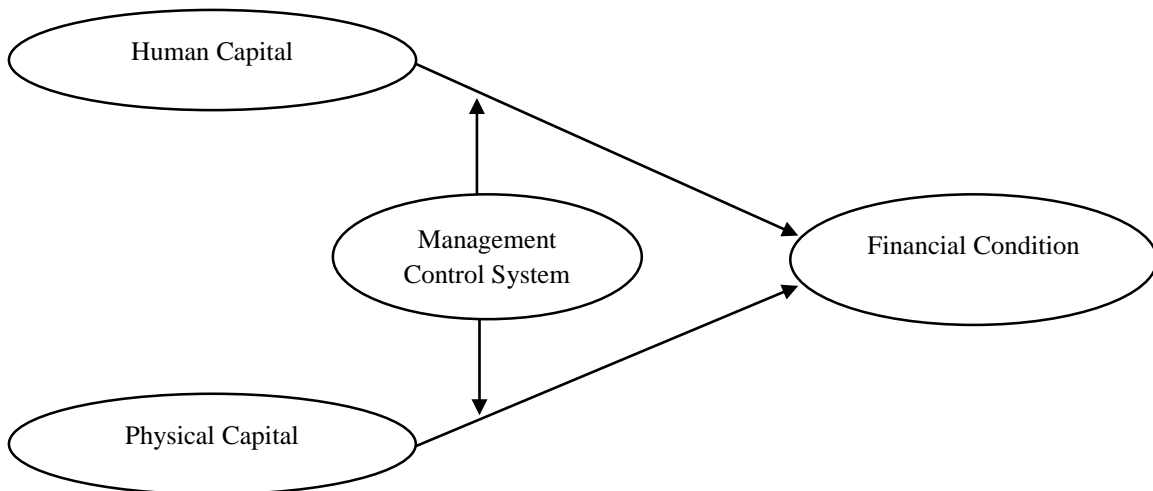
1 resources and evaluate physical utility output with caution. By implementing this system, the  
2 positive effect of Physical Capital on Financial Condition will be considerably improved.  
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4 Latham and Locke (1979) also have strengthened the argument that a high degree of control  
5 may cause the financial resources (i.e. human and physical capital) are even impactful. The goal-  
6 setting theory (Latham and Locke, 1979; Locke *et al.*, 1981; Tosi *et al.*, 1991) postulates that clear  
7 and specific goals are proven to be more effective than “do your best” goals. The goals impact  
8 organisation as the degree of clarity is high, which also applies to Financial Condition. An  
9 organisation could perform a better Financial Condition as the control over Human and Physical  
10 Capital are more standardised and crystalised. Similarly, Snell (1992) found that clear standard  
11 played an essential role in developing a better control system.  
12

13 Given the vital role of control, this study proposes a management control system to control  
14 how the strategy in the company runs according to plans and objectives. According to Purnamasari  
15 (2009), to encourage companies to compete in increasingly fierce global competitions,  
16 professional managers must perform Management Control System. It is a process and structure  
17 systematically arranged by management in controlling activities so that the company's goals and  
18 objectives can be achieved. Therefore, Management Control System will moderate the effect of  
19 Human Capital and Physical Capital on Financial Condition. The last two hypotheses will be:  
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26 Hypothesis 3 (H3): Management Control System moderates the relationship between Human  
27 Capital and Financial Condition  
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29 Hypothesis 4 (H4): Management Control System moderates the relationship between Physical  
30 Capital and Financial Condition  
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54 Figure 1. Theoretical Framework  
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## METHOD

### *Participants*

Participants were employees of the Regional Financial and Asset Management Agency who served as the member of the Financial Report Compilation team in the Golden Triangle area of South Sulawesi. According to the human resource department, more than 100 employees worked in this team, and their jobs were related to financial evaluation and audit. Researchers had limited access to some information due to confidentiality reasons. The study was advertised to the three organisations, and participation was voluntary. The South Sulawesi Golden Triangle region was formed from a path connecting the capital city and two big cities in South Sulawesi (Makassar, Gowa and Maros). Some participants worked as Secretary, Budgetary, Treasury, Accounting and Information Technology and Regional Assets. This study recruited five people in each division to obtain a sufficient sample, resulting in 25 participants in each region. Since there were three regions, this study received responses from 75 participants in total. By implementing the *G\*Power* analysis, the number of participants ( $n= 75$ ) had enough power to eliminate the type II error (Faul *et al.*, 2007). The number of female participants was 53%, and male 47%, with most participants, had bachelor degrees (81%) and some post-graduate degrees (19%).

### *Measures*

This study employed measures which the researchers developed following the theory of each variable (Brislin, 1970; Hinkin *et al.*, 1997). There are four measuring instruments in this study. The following table 1 describes the construction of the measure:

Table 1. *Operational Variable*

Variable	Dimension	Indicator
<i>Human Capital</i> (Mignonedan O'Neil, 2005)		1. Special Competence 2. Work Experience 3. Skill
<i>Physical Capital</i> (Baldi, 2013)		1. Availability of Natural Resources and the Environment 2. Government Investment 3. Facilities and Infrastructure (e.g., Computer and Internet Networks)
Management Control System (Prabawati, 2010)		1. Strategic Planning 2. Implementation and Measurement 3. Evaluation
Financial Condition (Dinapoli, 2011)	Environment	1. Community needs 2. Population 3. Property Value 4. Inflation 5. Individual income 6. Budgeting
	Organisation	1. Budget Cost 2. Timeliness and accuracy of financial transactions

		3. Quality and timeliness of financial reporting
	Financial	1. Limitation of Debt 2. Potential Taxes 3. Legality of Expenditures

All the measures were developed in Bahasa Indonesia using a 5-point Likert-type scale (1= Strongly Disagree to 5= Strongly Agree). Human Capital Scale, Physical Capital Scale, and Management Control System Scale consisted of three items, while the Financial Condition Scale had 12 items. The items included “the organisation has many employees with special competence to accomplish challenging tasks” and “the organisation has implemented a well-designed evaluation system.” The measurement model, including construct validity and reliability, was examined to provide adequate support for the measurement model.

To test the measurement model, this study performed a Confirmatory Factor Analysis (CFA) with four measures (i.e., Human Capital, Physical Capital, Management Control System, and Financial Condition). The hypothesised model was tested against other alternative models. The fit indices confirmed that the hypothesized model showed a better fit ( $cmin/df= 1.2$ ,  $p > 0.05$ ,  $RMSEA= .05$ , and  $SRMR= .04$ ) than the two-predictor model where Human and Physical Capital were combined ( $cmin/df= 2$ ,  $p > 0.05$ ,  $RMSEA= .08$ , and  $SRMR= .08$ ) and the single-predictor model where all predictors and Management Control System were combined in the model ( $cmin/df= 4$ ,  $p > 0.05$ ,  $RMSEA= .09$ , and  $SRMR= .098$ ). These results suggested that the data had four independent constructs confirming the proposed theoretical model. Outer loading value indicated that the convergent validity of the data had coefficients above 0.50 for each item and the  $t$ -value for each item above 1.96. Also, the Average Variance Extracted (AVE) value in each construct variable was greater than 0.50. Based on the results, all constructs in the proposed theoretical model fit into the convergent validity criteria. Those can be seen in the following table:

Table 2. *Average Variance Extracted (AVE)*

Variabel	AVE
Human Capital	0.617
Physical Capital	0.600
Management Control System	0.534
Financial Condition	0.702

Source: Primary data

The reliability test aims to examine the composite reliability of each measurement construct. The results suggested that the constructs had composite reliability coefficients above 0.70 (see table 3), confirming all the constructs had acceptable reliability.

Table 3. *Composite Reliability*

Variable	Composite Reliability
Human Capital	0.826
Physical Capital	0.818

Management Control System	0.931
Financial Condition	0.976

Source: Primary data

### Procedure

This research was part of a larger research program conducted by the regional financial institution. Data collection was conducted using a three-wave data collection technique to avoid common method biases (MacKenzie and Podsakoff, 2012). The survey booklets were delivered to the Human Resource Department (HRD) Office, and the HRD personnel sent the booklets to the potential participants. In the first phase, researchers collected demographic, human capital and physical capital data. After a week, researchers collected data for the Management Control System and the following week the Financial Condition data. Participants were asked to complete the questionnaire from the beginning to the end of the data collection, which lasted for one month. All participants ( $n= 75$ , 100%) fully participated in the study from the beginning to the end of the data collection. Informed consent was obtained from each participant in the beginning of the data collection. This study followed and obeyed the ethical standards of the institutional and national research committee of Indonesia. Study protocol number UH.EB.005.01.03.20 was reviewed and approved by the Research Ethics Committee at Universitas Hasanuddin in Indonesia.

## RESULTS AND DISCUSSION

### Results

This study conducted several stages in the data analysis. First, the data were analysed using descriptive statistics and the bivariate correlation technique. Secondly, the relationship between variables was tested using Pearson Product-moment Correlation. Lastly, the Hierarchical Moderated Regressions test (Anderson, 1986) was conducted to answer hypotheses.

Table 4. *Descriptive Statistics and Bivariate Correlations*

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
Human Capital	11.43	1.21	-					
Physical Capital	11.79	1.23	.52**	-				
MCS	12.12	1.15	.45**	.54**	-			
FC(Environment)	22.90	2.52	.53**	.56**	.73**	-		
FC(Institution)	12.17	1.22	.30**	.34**	.62**	.78**	-	
FC(Financial)	12.26	1.35	.46**	.46**	.67**	.72**	.64**	-
FC Total	47.33	4.63	.50**	.53**	.76**	.86**	.87**	.85**

Note:  $N= 75$ ,  $M=$  Mean,  $SD=$  Standard Deviation, MCS= Management Control System, FC= Financial Condition, \*\* $p<.01$

Table 4 above showed the means and standard deviations for each variable in the study. In addition, the relationship between variables was presented. Generally, all variables in the study were positively and significantly correlated. The level of relation between these variables ranged from  $r= .34$  ( $p <.01$ ) to  $r = .86$  ( $p<.01$ ). The Human Capital had a strong correlation with the

Financial Condition ( $r = .50, p < .01$ ), and so did the Physical Capital ( $r = .53, p < .01$ ). The relation between the Management Control System and the Financial Condition was even stronger with the correlation coefficient of  $r = .76 (p < .01)$ . The results indicated that the two independent variables (i.e. Human Capital and Physical Capital) and Management Control System had a strong positive relationship with Financial Condition.

After performing the descriptive statistics and bivariate correlation, the Hierarchical Moderated Regressions analysis was performed. In this study, the regression technique was considered appropriate to examine the contribution of each predictor in different regression models (de Jong, 1999). The following were the results of the analysis:

Tabel 5. Moderated Regressions with Financial Condition as Dependent Variable

Model		$R^2$	Adj. $R^2$	$\Delta R^2$	$\Delta F$	$\beta$
1	Human Capital	.25***	.24	-	24.81	.50***
2	Human Capital Physical Capital	.35**	.33	.10**	10.86	.31** .37**
3	Human Capital Physical Capital HC*MCS	.36**	.34	.01	1.47	.32** .37** -.12
4	Human Capital Physical Capital HC*MCS PC*MCS	.43**	.40	.06**	7.98	.33** .33** -.33** .34**

Note:  $N = 75$ ,  $\Delta$  = change,  $\beta$  = Standardized Beta Weight, HC = Human Capital, PC = Physical Capital, \*\*\*  $p < .001$ , \*\*  $p < .01$

This analysis technique allowed researchers to capture the incremental contribution of each predictor in the models. Before running the analysis, all predictors and the moderating variable were mean-centred to eliminate the risk of multicollinearity (Hayes, 2013). With Human Capital as the only predictor, the first model showed a significant impact on the Financial Condition ( $Adj. R^2 = .25, p < .001$ ). In the second model, Physical Capital was entered, and it contributed a positive and significant added value to the Financial Condition ( $\Delta R^2 = .10, p < .01$ ). In model 3, the interaction between Human Capital and Management Control System did not significantly increase the variance of the Financial Condition ( $\Delta R^2 = .01, p > .05$ ). Model 4 was the regression model that gave the highest contribution to the variance of the Financial Condition ( $\Delta R^2 = .06, p < .01$ ). In model 4, all predictors and the two interactions significantly predicted Financial Condition. However, the interaction between Human Capital and Management Control System contributed a negative effect on Financial Condition.

The analysis showed that the impact of Human Capital on Financial Condition was positive and significant across all regression models. When there were no other variables in the model, the impact of Human Capital on Financial Condition tended to be strong ( $Adj. R^2 = .24, \beta = .50, p < .001$ ). The impact of Human Capital on Financial Condition remained positive and significant

across all the regression models, including in model 4 ( $Adj. R^2 = .40, \beta = .33, p < .001$ ). Based on these results, Human Capital had a positive effect on the Financial Condition, which provided support for H1. The presence of Physical Capital to predict Financial Condition also had a positive impact on all regression models. In model 4, Physical Capital had the same effect as Human Capital ( $Adj. R^2 = .40, \beta = .33, p < .001$ ). The results also provided support for H2.

In model 4, the interaction between Human Capital and Management Control System contributed negatively to Financial Condition ( $\beta = -.33, p < .01$ ). The impact of Human Capital on Financial Condition depended on the level of the Management Control System. The higher the Management Control System, the lower the impact of Human Capital on Financial Condition, and vice versa. This finding supported H3 that stated the Management Control System moderated the relationship between Human Capital and Financial Condition. However, one should note that Management Control System could weaken the effect of Human Capital on Financial Condition.

The interaction between Physical Capital and Management Control System also significantly impacted the Financial Condition ( $\beta = .34, p < .001$ ). The impact of this interaction was positive, indicating that the effect of Physical Capital on the Financial Condition would increase when the Management Control System was high. Conversely, if a low Management Control System could reduce the impact of Physical Capital on the Financial Condition, these results provided support for H4.

The last regression model (model 4) showed  $R^2 = .43$  ( $p < .01$ ), or the model explained 43% of the variance in the Financial Condition. This finding considerably explained a large portion of Financial Condition in the organisations.

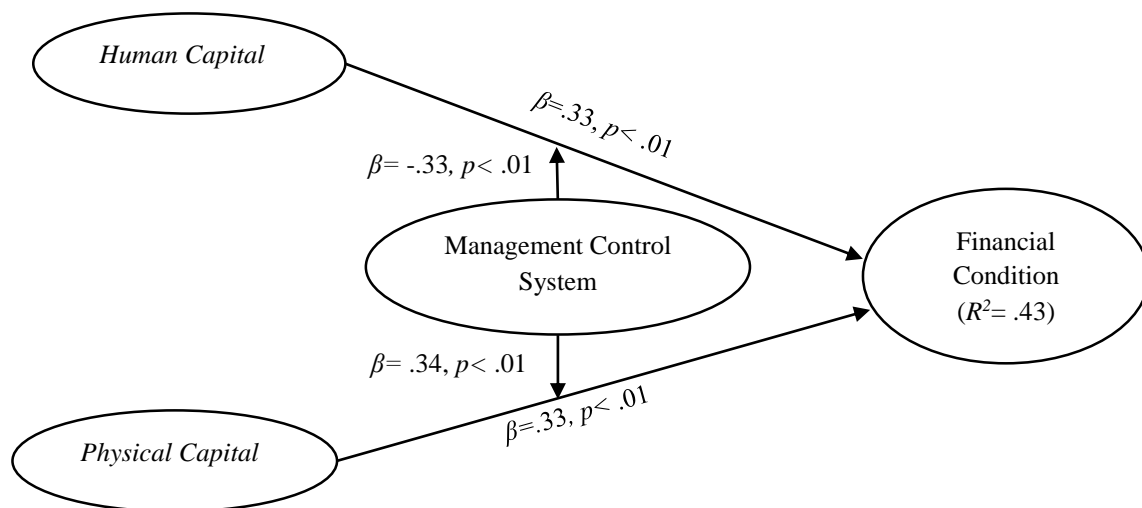


Figure 2. Empirical model and coefficients

Figure 3 below illustrates the interaction between Human Capital and Management Control Systems in predicting Financial Condition. The graph explained that the value of the prediction model was higher when the Management Control System was at a low level ( $R^2 = .16$ ), compared to when it was at a high level ( $R^2 = .13$ ). The existence of a high Management Control System could reduce the impact of Human Capital on Financial Condition.

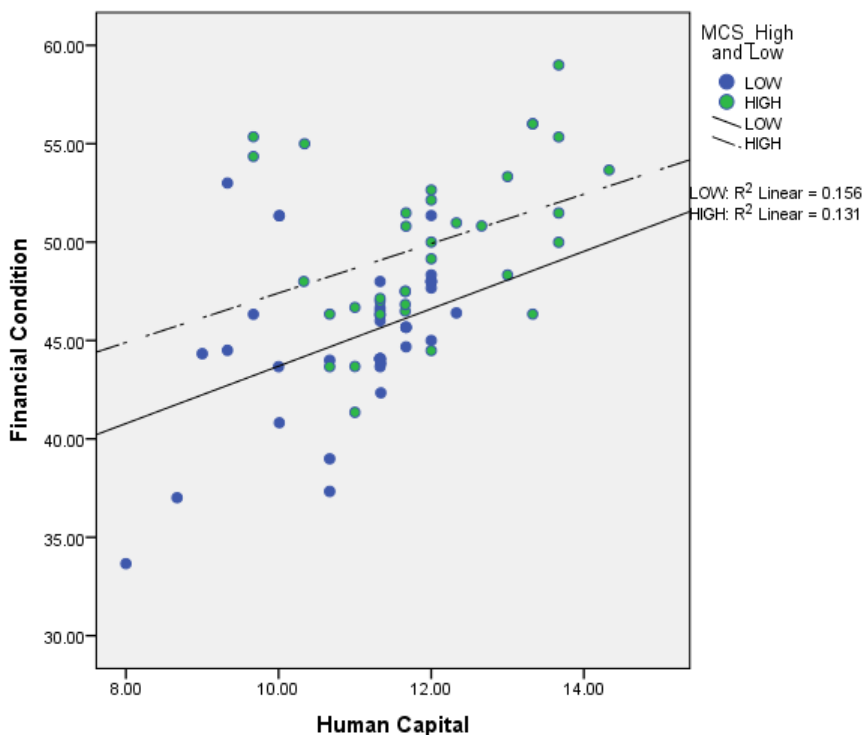


Figure 3. *Interaction between Human Capital and Management Control System*

The interaction between Physical Capital and Management Control System can be seen in Figure 4. Unlike the previous interaction model, the interaction in figure 4 showed that the impact of Physical Capital on Financial Condition was stronger when the Management Control System was also at a high level ( $R^2 = .22$ ) compared to low levels ( $R^2 = .07$ ). A high Management Control System could support the positive impact of Physical Capital on Financial Condition.

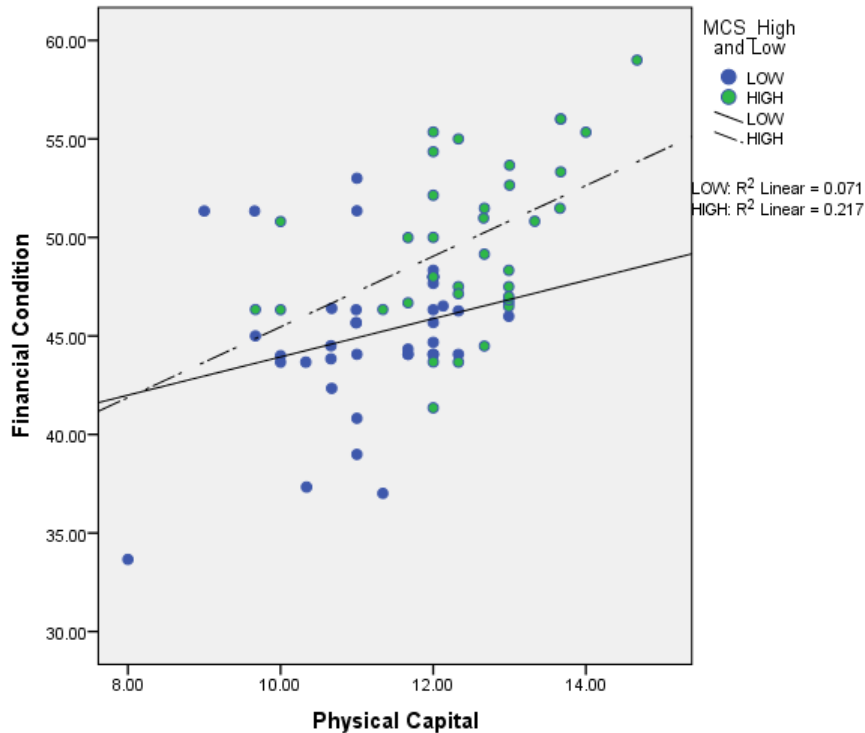


Figure 4. Interaction between Physical Capital and Management Control System

## DISCUSSION

### *The Effect of Human Capital on Financial Condition*

The analysis showed that Human Capital had a positive influence on Financial Condition. Based on the analysis, the higher Human Capital (e.g., competencies, work experience and skills), the more likely Financial Condition leverages in the golden triangle areas. This suggests that Human Capital affects environmental, institutional, and Financial Conditions. In this study, a successful Financial Condition referred to the environment, institution and financial dimensions.

Firstly, within the environmental dimension, there were community needs, populations, property values, inflation, individual income, and budgeting, all of which were necessary to establish a stable Financial Condition. Secondly, human resources also contribute to institutional financial performance. Human Capital aspects support the organisation strategy, including the availability of budget, timeliness and accuracy of financial transactions, quality, and timeliness of financial reporting. Lastly, the workforce competence also supports the financial dimension, including debt limits, tax potential and legality of expenditure. Successful financial dimension, in this regard, relied upon the workforce competence. Human capital serves as a means to monitor debt limits and tax management, for example. The increase (or decrease) in Human Capital will influence the regional Financial Condition. This notion has been previously supported by Zulkifli (2018), Ramli et al. (2014), Nimtrakoon (2015), Ervina et al. (2008), Is et al. (2014).

The RBT (Barney, 1991, 2001) has explained the importance of valuable and rare resources in fostering organisation competitive advantages. Human Capital also acted as a valuable resource for organisational success, including financial achievement within the organisation. As the organisation maintains sufficient quality of Human Capital, the workforce will strive to facilitate

1 sustainable financial performance. Thus, according to this study, the RBT successfully explained  
2 the role of Human Capital in predicting Financial Condition.  
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4 Special competence, work experience, and skills became important points in improving  
5 Financial Condition because those could be an essential part of improving the organisation's  
6 innovation, strategies, and objectives. In this study, participants perceived that the development of  
7 Human Capital increased the regional government's ability to improve the economy and maximise  
8 its potential. This research postulated that the role of Human Capital in a regional government  
9 needed to be reconsidered because Human Capital can strengthen the goal attainment of a regional  
10 government.  
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### 14 ***The Effect of Physical Capital on Financial Condition***

15 The results showed that Physical Capital had a positive effect on Financial Condition. The  
16 level of Physical Capital in terms of the availability of natural resources and the environment,  
17 government investment, facilities and infrastructure (e.g. computers, internet access) had a  
18 significant impact on Financial Condition in the three regional areas. Physical Capital contributed  
19 positively to Financial Condition, including fostering environmental, institutional, and financial  
20 aspects.  
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25 As mentioned earlier, there are three distinct dimensions of Financial Condition, namely  
26 the environment, institutions and finances. These three dimensions depict the local government's  
27 financial performance in South Sulawesi (i.e. Makassar, Gowa and Maros). In improving Financial  
28 Condition, the regional governments should take into account the community needs, populations,  
29 property values, inflation, individual income and budgeting. The second dimension was the  
30 institution, which covers budget availability, timeliness and accuracy of financial transactions, and  
31 the quality and timeliness of financial reporting. The third dimension was finance which covered  
32 debt limits, tax potential and legality of expenditure.  
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36 The RBT has supported that Physical Capital (e.g. technology) has provided valuable  
37 resources for the governmental organisations in South Sulawesi, Indonesia. This empirical study  
38 has supported the theory and previous findings. Physical Capital had a significant positive  
39 influence on the regional government's Financial Condition in these three regions. Barney (2001)  
40 proposed that the competitive advantages of an organisation can be achieved by utilising the  
41 existing valuable and rare resources in the organisation. Consistently, in the case of local  
42 government organisations in Indonesia, it appeared that Physical Capital added a significant  
43 amount of incremental variances to the development of Financial Condition. Physical assets,  
44 technologies, devices and other facilities were viewed as the essential elements of a successful  
45 Financial Condition.  
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50 This study was also in line with research conducted by Zulkifli (2018), Nimtrakoon (2015),  
51 Ervina et al. (2008), Is et al. (2014). However, the effect could be indirect as other variables might  
52 influence the relationship. For example, Nirvana et al. (2014) discovered that Cultural Capital  
53 moderated the Physical Capital - Financial Condition relationship. Therefore, this study also  
54 considered testing the moderating effect of the Management Control System in the relationship.  
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57 Limitations of Physical Capital often became a problem of a local government regardless  
58 of the quality of Human Capital. Generally, regions with outstanding Human Capital would be  
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1 more developed if juxtaposed with the availability of natural resources and the environment,  
2 adequate government investment, facilities and infrastructure. In this study, participants  
3 considered that Physical Capital, in the form of technologies, facilities, and infrastructures,  
4 provided significant support for the region's Financial Condition.  
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### 8 ***The Moderation Effect of Management Control System on the Relation of Human Capital and*** 9 ***Financial Condition***

10 Apart from the direct effect of Human Capital on Financial Condition, this study also found  
11 that Management Control System moderated the effect of Human Capital on Financial Condition.  
12 This research was supported by the Control Theory (Snell, 1992) as the theory stated that managing  
13 human resources must be supported with input, behavioural, and output control. In addition, the  
14 Control Theory and the Goal Setting (Latham and Locke, 1979) postulated that clear and  
15 crystalised standard potentially emphasise the effect of resources. Besides, the goal-setting  
16 principles have stressed enough the importance of specific and clear goals. These theories have  
17 supported the notion that organisations with supportive human resources, but unspecified goals  
18 and rules would experience constraints to rise their Financial Condition.  
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23 This study discovered interesting findings related to the moderation effect of the  
24 Management Control System. The presence of a lower degree of Management Control System  
25 could trigger improvement in local government organisation. In contrast, a high degree of  
26 Management Control System would reduce the effect of Human Capital on Financial Condition.  
27 The theories have supported that Management Control System facilitated the Human Capital –  
28 Financial Condition relationship. The moderating effect seems to be more positive as the theories  
29 suggested that a clear and specific goal in human resource management could improve Financial  
30 Condition. However, this study showed opposing evidence as the moderating effect was found to  
31 be negative. This indicated that the existence of a Management Control System could weaken the  
32 role of Human Capital on Financial Condition.  
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37 In the local government areas, Human Capital significantly determined the fluctuation of  
38 Financial Condition. However, as the Management Control System implemented with a  
39 considerably high degree of input, behavioural, and output control, Human Capital would be less  
40 influential. The Management Control System improves Human Capital management by  
41 standardising control over the input quality, specifying work behaviour, and directing control to  
42 attain desired output. The government officials could have perceived Human Capital as an  
43 insignificant resource as the human resources management was highly controlled. The regional  
44 governments could have discarded the importance of Human Capital for Financial Condition as  
45 they perceived a high Management Control System.  
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50 The results of this study were in line with the research conducted by Chandra (2017), Ong  
51 et al. (2016), Rachma (2014), where they all found that the Management Control System had a  
52 significant influence on Human Capital and Financial Condition. However, scholars and  
53 government officials should consider how the Human Capital and Management Control System  
54 interact to predict Financial Condition. As the Management Control System increases, the Human  
55 Capital impact on Financial Condition declines. Thus, organisations with a flawed Management  
56 Control System may require high quality of Human Capital to improve financial conditions.  
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3 ***The Moderation Effect of Management Control System on the Relation of Physical Capital and***  
4 ***Financial Condition***

5 This study also indicated that the Management Control System moderated the effect of  
6 Physical Capital on Financial Condition. The relation between Physical Capital and Financial  
7 Condition increased as the Management Control System was included in the prediction model. As  
8 predicted previously using the Control Theory by Snell (1992), a high degree of control over input,  
9 behaviour, and output improved the quality of Physical Capital. In this respect, Physical Capital  
10 could be more influential as the Management Control System ensured its quality by controlling  
11 input of physical resources, controlling behaviours in utilising the resources, and directing the  
12 outputs of resources. This study suggested that as the Management Control System increases, it  
13 improves the effect of Physical Capital on Financial Condition.  
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18 Unlike the former moderating effect, Management Control System and Physical Capital  
19 went hand-in-hand in predicting Financial Condition. It indicated that the effect of Physical Capital  
20 on Financial Condition depended on the degree of the control system within the organisation.  
21 Organisations with abundant Physical Capital may not always lead to high performing Financial  
22 Condition unless they implement a favourable Management Control System. This sheds light on  
23 the importance of the Management Control System in facilitating the role of Physical Capital.  
24 Hypothetically, if the organisations aim to have fewer physical resources, managing the resources  
25 using the Management Control System principles will accentuate the effect of the resources on the  
26 organisations' Financial Condition.  
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31 The results were in line with some previous investigations conducted by Chandra (2017),  
32 Ong et al. (2016), and Rachma (2014). In those studies, Management Control System was one of  
33 the predictors of Financial Performance in organisations. The Management Control System's effect  
34 is vital as it serves as control over resources availability and quality. Anthony and Govindarajan  
35 (2005) stated that Management Control System was also a process for detecting and correcting  
36 errors at work.  
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39 In the regional government offices, the three golden areas of South Sulawesi may have  
40 relied on the Management Control System to attain an expected level of Financial Condition. In  
41 this regard, the regional government should strive to optimise control over the physical resources.  
42 The control system should manage the selection of equipment, human behaviours related to the  
43 application of the equipment and monitor the effectiveness of specific technologies or devices on  
44 outputs. Physical Capital positively predicts the regional government Financial Condition as far as  
45 the physical resources controlled with systematic procedure starting from input to output.  
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50 ***Implications***

51 This research empirically examined the influence of moderating effect of Management  
52 Control Systems on the two antecedents of the regional Financial Condition; Human Capital and  
53 Physical Capital. The results supported that the perceived Management Control System  
54 significantly determined Human Capital and Physical Capital's effect on Financial Condition.  
55 However, this moderator behaved differently towards Human and Physical Capital in the regional  
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1 government organisations. Management Control System tended to alter the low quality of Human  
2 Capital while at the same time strengthen the Physical Capital – Financial Condition Relationship.  
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4 If the regional governments implement a high Management Control System, the Physical  
5 Capital will be more likely to foster Financial Condition. Unfortunately, this condition will also  
6 reduce the Human Capital’s effect on Financial Condition. Albeit the organisations have exhibited  
7 sufficient workforce competence, it will have less impact on the Financial Condition as the Control  
8 System is highly managed. Presumably, outstanding Human Capital can tolerate a flawed  
9 Management Control System and still positively impacts Financial Condition. Control System is  
10 vital for directing the effect of resources on Financial Condition. However, in this case, the local  
11 government officials should be aware that increasing control over Human Capital can reduce the  
12 effect of human resources on Financial Condition. Human Capital in the local government areas  
13 may not impact financial performance as the organisations implement high control system.  
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### 19 *Limitations and Future Research Directions*

20 This study employed a set of questionnaire as valid and reliable measures of variables being  
21 studied. The initial attempt was to collect objective data. However, the existing objective data were  
22 not adequately standardised across different organisations. Accessing the data and information  
23 related to the objective financial record was also strictly prohibited. Likewise, researchers cannot  
24 find alternative objective data that measured the level of achievement of the whole existing  
25 variables, other than the perception of employees who work in the organisations. This study then  
26 used Subject Matter Experts (SMEs) perception of each variable, and this procedure had been  
27 permitted by the research ethics committees and the government officials. Therefore, future studies  
28 can repeat this method using objective data sources from government officials by establishing  
29 mutual collaborations.  
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35 Furthermore, although this research succeeded in involving representatives from all  
36 agencies with varying positions, the number of participants involved was still small compared to  
37 previous studies. By increasing the number of participants and involving more governmental  
38 organisations, future studies would provide more information regarding the effect of the control  
39 system in the regional government organisations.  
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### 43 **CONCLUSIONS**

44 This study has two folds. Firstly, it contributed new information about the effect of two  
45 key resources (i.e. Human and Physical Capital) on financial performance in governmental  
46 organisations. Secondly, this study broadens our understanding of the unique role of the  
47 Management Control System in the local government organisations in South Sulawesi, Indonesia.  
48 The first part of the findings was consistent with the RBT as both Human and Physical Capital  
49 significantly predicted Financial Condition. However, the second part of the findings was mixed  
50 as Management Control System negatively moderated the effect of Human Capital while at the  
51 same time also positively moderated the effect of Physical Capital on Financial Condition. This  
52 study highlighted the importance of improving the standard of the control system in managing the  
53 local government organisations. Although it potentially reduces Human Capital's effect, a high  
54 degree of control will help organisations maintain and improve desirable Financial Condition.  
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KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN  
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APPROVAL NOTICE

No. 2017/UNH-4/KP.06.10/2020

Principal Researcher	:	Asri Usman
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Project Title	:	Human Capital and Physical Capital in Regional Financial Condition
Project ID	:	UH.EB.005.01.03.20
Project start date	:	10 January 2020
Project end date	:	10 January 2021

The above proposed project has been **approved** based on the information given in the application and its attachments. Please inform the *Social and Behavioral Research Ethics division at Universitas Hasanuddin*, if the above research project is discontinued before the expected date of completion. In addition, you are required to report anything which might warrant review of ethical approval of the protocol, this might include:

- serious or unexpected adverse impacts on participants
- Amendments in the protocol
- Changes to the research team

Please reach the office of Research Ethics at Fakultas Ekonomi dan Bisnis, Universitas Hasanuddin if this project requires amendments or extension. Your report is due on the completion of the project.

Makassar, 05 January 2020

Dekan,



Prof. Dr. Abd. Rahman Kadir, SE., M.Si., CIPM  
Fakultas Ekonomi dan Bisnis Universitas Hasanuddin

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5 **INFORMED CONSENT**  
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8 Title of Research: Human Capital and Physical Capital in  
9 Regional Financial Condition

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19 Makassar, Indonesia

20  
21 1. Introduction and Purpose of the Study

22 *This study aims to investigate employees' perception about their daily work routine which*  
23 *includes their idea about their performance and experience in the workplace.*

24 2. Description of the Research

25 *In this study you will be asked to complete questionnaires. The questionnaire will come in*  
26 *three times in every two weeks. Each questionnaire will take up to 15 minutes to*  
27 *complete.*

28 3. Participation

29 *We estimate there will be 100 employees participate in this study. They will come from*  
30 *the Regional Financial and Asset Management Agency team in the Golden Triangle area*  
31 *of South Sulawesi. As a participant, you will receive a survey booklet three times every*  
32 *two weeks. Your decision to participate in this study is complete voluntary. If you decide*  
33 *to not participate in this study, it will not affect the care, services, or benefits to which*  
34 *you are entitled.*

35 4. Potential Risks and Discomforts

36 *You may experience some discomforts in filling the questionnaire. If you do not feel*  
37 *comfortable enough to answer the questions, you can stop at any point. You can withdraw*  
38 *from the study at any point and your decision will not affect your job, the care, service, or*  
39 *benefits to which you are entitled. This study and your participation will not impact your*  
40 *job or your performance report.*

41 5. Potential Benefits

42 *People who participate in this study may better understand the link between human*  
43 *resources and financial condition.*  
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## THE EFFECT OF HUMAN CAPITAL AND PHYSICAL CAPITAL ON REGIONAL FINANCIAL CONDITION: THE MODERATING EFFECT OF MANAGEMENT CONTROL SYSTEM

--Manuscript Draft--

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<b>Abstract:</b>	<p>This study aims to examine the effect of Human Capital and Physical Capital on Regional Financial Condition with a Management Control System as moderator. Participants were employees of the Regional Financial and Asset Management Directorates which were located in three major cities/districts in the province of South Sulawesi, Indonesia. The 75 randomly selected participants involved in a three-wave data collection procedure. Four measures were developed (i.e. Human Capital, Physical Capital, Management Control System, and Financial Condition) which were found to be constructively valid and reliable for research purposes. The results showed that the Human Capital and Physical Capital directly influenced the Financial Conditions. The effect of Human and Physical Capital were moderated by the Management Control System. Management Control System negatively moderated the effect of Human Capital while at the same time also positively moderated the effect of Physical Capital on Financial Condition. This study collected participant's perceptions towards the study variables without any further investigation to the objective measures. Although, some scholars may find this as the lack of evidence against the actual financial conditions, acknowledging experts' perceptions should provide a better understanding on the experienced financial condition. Various studies have investigated some factors which may affect the Financial Conditions. However, this study proposed an examination of the role of Management Control System. In this case, a capital which is owned by the financial organizations cannot provide a direct impact on the Financial Conditions if there is no role of the Management Control System.</p>
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<b>Opposed Reviewers:</b>	

# THE EFFECT OF HUMAN CAPITAL AND PHYSICAL CAPITAL ON REGIONAL FINANCIAL CONDITION: THE MODERATING EFFECT OF MANAGEMENT CONTROL SYSTEM

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## Abstract

This study aims to examine the effect of Human Capital and Physical Capital on Regional Financial Condition with a Management Control System as moderator. Participants were employees of the Regional Financial and Asset Management Directorates which were located in three major cities/districts in the province of South Sulawesi, Indonesia. The 75 randomly selected participants involved in a three-wave data collection procedure. Four measures were developed (i.e. Human Capital, Physical Capital, Management Control System, and Financial Condition) which were found to be constructively valid and reliable for research purposes. The results showed that the Human Capital and Physical Capital directly influenced the Financial Conditions. The effect of Human and Physical Capital were moderated by the Management Control System. Management Control System negatively moderated the effect of Human Capital while at the same time also positively moderated the effect of Physical Capital on Financial Condition. This study collected participant's perceptions towards the study variables without any further investigation to the objective measures. Although, some scholars may find this as the lack of evidence against the actual financial conditions, acknowledging experts' perceptions should provide a better understanding on the experienced financial condition. Various studies have investigated some factors which may affect the Financial Conditions. However, this study proposed an examination of the role of Management Control System. In this case, a capital which is owned by the financial organizations cannot provide a direct impact on the Financial Conditions if there is no role of the Management Control System.

**Keywords:** human capital, physical capital, management control system, financial condition, and Indonesia

## INTRODUCTION

Financial Condition is determined by the ability of an area to fulfill an obligation for prospering or serving a community. In this regards, there are three core dimensions to evaluate the financial conditions they are environmental, institutional and financial dimensions (Dinapoli, 2011). These three dimensions will be interconnected to produce a sufficient Financial Condition.

1 By fulfilling all these dimensions, government will be able to bring more stable financial  
2 conditions.  
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4 Firstly, the environmental dimension is the assessment of Financial Conditions which  
5 assessed based on how a government supports or impedes regulations, especially on bringing  
6 innovations to the community. Secondly, the institutional dimension is a management practice and  
7 legislative policy which guides the fiscal decision making. Its function is often as a response to the  
8 environmental or political factors (Dinapoli, 2011). Lastly, financial dimension is most related to  
9 financial performance. This particular dimension includes potential tax or incomes in a particular  
10 region and a debt limit and a legality of expenditure from a region. For some countries, it also  
11 consists of fiscal decentralization management in which each region will obtain a budget for the  
12 funds to be managed.  
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16 One of the most important questions to this issue is, what are variables may potentially  
17 predict financial conditions. Considering the important roles of resources, the Resource Based  
18 Theory (Barney, 1991) supports the notion that Human Capital and Physical Capital provides  
19 significant resources for maintaining sufficient financial conditions. Human capital becomes  
20 considerably important because it is a source of innovation and strategy renewal. Human Capital  
21 is related to any knowledge, skills, abilities and attitudes owned by personnel in organisations  
22 which are highly supportive for organizational success (Perrotta, 2018). Further, it can be fostered  
23 from an applied research, management objective, reengineering process and improvement or  
24 development of workforce skills. Furthermore, human capital creates incremental values to  
25 organisations on a daily basis, via motivation, commitment, competence and effectiveness of the  
26 teamwork. However, each organization offers distinctive approaches in managing human capital  
27 and it also means different values (Lepak and Snell, 2002). Thus, human capital provides unique  
28 contributions to financial condition based on unique approaches given by organisations.  
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34 In addition to Human Capital, Physical Capital also adds incremental variance to the  
35 successful financial conditions. The notion of Physical Capital includes natural resources and other  
36 technological devices (Galor and Moav, 2004). The existence of Physical Capital supports the  
37 improvement of the Financial Condition of an area. To illustrate, the development of the basic  
38 physical conditions such as sanitation, clean water, and electricity in an area will also help to foster  
39 the services and welfare for the community which may later improve Financial Conditions.  
40 Physical Capital is also useful for creating additional values to producing desired input. Thus, it is  
41 reasonable to conclude that both human and physical resources act together to influence a region  
42 financial condition.  
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47 The direct effect of these two capitals (i.e. human and physical) may have been moderated  
48 by the level of control performed by organisations. In Indonesia, some empirical investigations  
49 conducted by Chandra (2017), and Sari and Fitriani (2009) found that the management control  
50 system was able to improve Financial Conditions. In these two studies, Human Capital and  
51 Physical Capital directly impacted financial performance where the organisations had sufficient  
52 control over the resources. As a result, the organisations performed better and showed expected  
53 financial conditions.  
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57 The concept of Control theory in strategic human resource management from Snell (1992)  
58 has provided a clear arguments on how high control facilitates positive effect of human capital and  
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1 physical capital on desired financial conditions. According to the theory, Human Capital and  
2 Physical Capital will leverage financial performance only if an organisation implement certain  
3 degree of control over human capital inputs, behavioural controls, and desired outputs. This further  
4 suggests that possessing a management control system favours the effect of Human and Physical  
5 Capital on Financial Conditions.  
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8 Accordingly, management control system becomes a moderation in creating good  
9 Financial Condition for one particular region. In a developing country like Indonesia, the  
10 management control system is one of the strongest foundations of good governance (Purnomo,  
11 and Budiawan, 2014). The internal control system includes various management tools that aim to  
12 achieve a broad range of objectives. In addition, Riawan (2016) stated that the management control  
13 system is able to improve the Financial Condition of an organisation. Meanwhile, Masyur (2016)  
14 postulated that local governments encounter difficulties in implementing a good control system  
15 strategy because the absence of synergy between Human Capital and the control strategy.  
16 Subsequently, this made the public services became less efficient. Control becomes a crucial  
17 element to ensure that financial condition is achieved as expected.  
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22 Management control system consists of management control structures and processes  
23 (Halim et al., 2012). The control structure is centered on a variety of responsibility centers, while  
24 the management control process includes budget preparation, implementation and measurement  
25 as well as reporting and analysis. In the process of the management control, the decisions are made  
26 based on the procedures and other schedules which carried out repeatedly year after year. Those  
27 procedures usually start from programming. The program is translated into the form of a budget,  
28 then the company operates based on a predetermined budget, procedure and policy. The final  
29 results are then compared with the budget, after being evaluated and improved if necessary. Since  
30 the procedure is carried out repeatedly every year, then management requires a management  
31 control system to improve its performance so that the company's goals can be achieved.  
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36 By applying the Resource Based theory and Control theory in Strategic Management, one  
37 should be able to capture that the presence of high management control will leverage the effect of  
38 human and physical capital on financial condition. However, some contextual conditions may also  
39 influence this argument. For instance, Indonesia as a developing countries implements a  
40 decentralisation policies which also include financial autonomy for its provinces. Consequently,  
41 some experts and practitioners have questioned about some antecedents related to regional  
42 financial performance.  
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46 Law No. 23 of 2014 states the implementation of regional government directed to  
47 accelerate the realization of community welfare through improving services, empowerment, and  
48 community participation, as well as enhancing regional competitiveness by taking it into an  
49 account of the principles of democracy, equality, justice, and uniqueness of the area in the system  
50 of the Unitary State of the Republic of Indonesia. Regional autonomy is a part of decentralization.  
51 It constructs each region to have the right and obligation for regulating their own area but with the  
52 control of the central government and in accordance with the law. A fiscal decentralization is  
53 implemented in order to encourage several levels of government which are able to control each  
54 region. The local governments in each region will accommodate the aspirations of a community  
55 and be obliged to prosper the community in terms of services. The success of a regional autonomy  
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1 is integrated with the ability of a region to manage the funds that have been budgeted to its area.  
2 In addition, the local governments should also be able to utilize the resources that are already  
3 owned by the region. Therefore, the success of a regional autonomy significantly is related to the  
4 Financial Condition of the region.  
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7 Unfortunately, contrasting views emerged regarding the effect of Human Capital and  
8 Physical Capital on Financial Conditions in Indonesia. For instance, Nirwana and colleagues  
9 (2014) found that Human Capital and Physical Capital had non-significant influence on Financial  
10 Conditions. However, they found it emerged after intervening through the culture. While, Zulkifli  
11 et al. (2018) found contrasting findings where Human Capital and Physical Capital had a positive  
12 effect on Financial Performance. Another finding suggested that the differences were caused by  
13 the influence of Indonesia's national culture. The level of uncertainty was found to be higher in  
14 Indonesia than Australia which later reduce the effect of any resources on financial performance  
15 (Graham and Sathye, 2017).  
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18 Additionally, pressure from the central government has imposed some policies in  
19 managing budget in local government. Although provincial governments had adapted a new  
20 accounting system, the issue was the local officials found it difficult to maintain a well-controlled  
21 and structured system (Harun and Kamase, 2012). In a similar vein, Mir and Sutiyono (2013) have  
22 discovered that the demand, supply, and the quality of Indonesian's local accounting system lacked  
23 of parity which also means the financial system implemented less effective control. This, then,  
24 causes a subsequent effect on the local financial performance as an effective decision-making and  
25 efficient management would be difficult to implement. Thus, in this situation exhibiting an  
26 effective control in managing resources lead to better financial performance.  
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29 This investigation is necessary in order to further understand the antecedents of financial  
30 conditions and the role of effective management control. Local governments in Indonesia may  
31 have undergone less effective control over accounting system and failed to address the issue since  
32 their financial reports were in a category of acceptable without exceptions. Sulawesi Selatan, in  
33 this case, acted as the main gate of Eastern Indonesia where many important businesses happens.  
34 Despite the prestigious financial condition, this local government was imposed to implement  
35 certain regulation from the central government. Additionally, some resources may have been used  
36 to support the financial performance. However, more empirical information is necessary to explore  
37 whether those resources influence financial condition or not.  
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40 Then, the theory and empirical evidence led this study to exert management control system  
41 as its moderation variable on observing the influence of Human Capital and Physical Capital on  
42 the Financial Conditions of the area which was chosen in this study. A fiscal decentralization is a  
43 government policy to increase the ability of an area to manage its own region. The policy will  
44 make the distance between the government and the community will be tightened by the presence  
45 of government representatives in each region who can take their respective policies to maximize  
46 the services to the community, with the management of the economic resources in the region. The  
47 local governments faced difficulties in implementing effective control system strategy because  
48 they were unable to link the relationship between Human Capital and the control strategy. As the  
49 results, it caused the public services became less efficient.  
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1 Having considered the above discussions, the research objectives are formulated as  
2 follows;  
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- 4 1. To examine the effect of Human Capital on Regional Financial Conditions.
- 5 2. To examine the effect of Physical Capital on Regional Financial Conditions.
- 6 3. To examine the effect of Human Capital on Regional Financial Conditions which are  
7 moderated by the Management Control System.  
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## 10 **LITERATURE REVIEW AND HYPOTHESES**

11 The Public Sector Accounting Board (2007) defined the Financial Conditions as the health  
12 of government finances as indicated by their ability to fulfill the financial obligations and the  
13 service commitments to the public, creditors, employees and others, While according to Dinapoli  
14 (2011), the Financial Condition is the ability of the local governments to comply the expenditure  
15 budget by taking the source of local revenue, and continuously providing services to the  
16 community.  
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19 Financial factors in Nirvana et al. (2014) is a financial distribution which run by the  
20 financial system. The financial system seeks to ensure adequate financial judgment and cover up  
21 liquidity. The Indicators of financial factors according to Dinapoli (2011) are the debt limits, the  
22 tax potential and the legality of expenditure. Institutional factors according to Dinapoli (2011) are  
23 management practices and the existence of policies or regulations of local governments which  
24 guarantee the implementation of the healthy governance. Furthermore, the institutional indicators  
25 are the budget and financial variance, the timeliness and accuracy of financial transactions, and  
26 the quality and timeliness of financial reporting.  
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29 In addition, Dinapoli (2011) stated that the Financial Conditions are determined by a  
30 combination of government environment, institutional and financial factors. For example when  
31 there is a decrease in population of a government, so there will be a reduction in the tax revenue  
32 (negative environmental factors), but the government can overcome this by reducing services.  
33 Increasing the tax rate, striving for the development of economic resources which ultimately  
34 determine the Financial Condition of the local governments.  
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37 Financial condition in a regional level can be influenced by several factors such as CEO  
38 power (Daily and Johnson, 1997), environmental and operational management (Sueyoshi and  
39 Goto, 2010), and technical performance (Kristensen et al., 2008). These antecedents can be  
40 grouped into two type of resource namely human capital and physical capital. The former was  
41 workforce competences (e.g. knowledge and skills), while the latter is more related to technology,  
42 devices, and equipment used to perform tasks in organisations. The human and physical capital  
43 will be the most two precious antecedents of organisation's financial condition.  
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46 The notion of human and physical capital as key antecedents of financial condition has  
47 been supported by a theoretical perspective. A resource theory or commonly called Resource  
48 Based Theory (RBT) uses a resource-based approach in the analysis of competitive advantages  
49 (Barney, 1991, 2001). The theory is used as a supporting theory in this study to see the effect of  
50 Human Capital and Physical Capital on regional Financial Conditions. The key to the RBT  
51 approach is a strategy of understanding the relation between valuable resources, organisation  
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1 capabilities, competitive advantage, and profitability. In the end, all those resources should  
2 particularly provide supports for maintaining the competitive advantage over time.  
3

4 The theory firstly introduced by Wernerfelt (1984) in his work entitled "*A Resource-based*  
5 *View of the Firm*". However, most of the researches referred to Barney's (1991) seminal work.  
6 The firm resources explained about how to help the company in improving the efficiency and  
7 effectiveness of operations. Furthermore, the competitive advantage can be understood by  
8 instilling an understanding of the company consists of heterogeneous and immovable elements.  
9 The steps in maximizing the competitive advantage of the company should fit into the four criteria,  
10 namely *valuable, awareness, inimitability and non-substitutability*.  
11

12 According to RBT, the resources can be generally defined by including the assets,  
13 organizational processes, organizational attributes, information, or knowledge controlled by the  
14 organizations which can be used to compile and imply the strategies. Regardless the number of  
15 resources, the RBT categorizes the resources into three major types;  
16

- 17 a. Physical Capital (e.g. technology, manufacturing, and equipment)
  - 18 b. Human Capital (e.g. training, experience, insight)
  - 19 c. Organizational capital resources (e.g. formal structural)
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25 Using the framework of the RBT, both Human and Physical Capital can maintain the  
26 quality of financial condition in an organisation, this includes public organisation such as  
27 provincial governments. Human Capital would provide the organisation with desired human  
28 resources which directly influence the quality of financial condition. Financial condition needs  
29 skillful personnel and experts to secure the accountability of the reporting system, for example.  
30 The existence of these expected workforces will sustain the quality of financial condition. The  
31 same case applies for the Physical Capital, organisation with abundant fruitful tools, devices, and  
32 equipment will be more likely to exert those tools to support firm achievement as well as providing  
33 support for financial condition.  
34

35 The concept of RBT, in this case, also asserts that Human and Physical Capital are able to  
36 create an organization's competitive advantage so as to generate the incremental values for the  
37 organization. The value referred to the better performance in an organization including financial  
38 performance. Throughout the application of adequate Human Capital and supportive Physical  
39 Capital, provincial offices can provide more sufficient and complete information towards a better  
40 financial conditions (Ghozali and Chariri, 2007).  
41

42 The supports from the two resources may not always provide desired effect on financial  
43 condition due to some conditions. For instance, previous studies have documented that  
44 organisational culture (Yesil and Kaya, 2013) and gender (Campbell and Mínguez-Vera, 2008)  
45 determined financial performance. Certain cultures may hinder the implementation of supportive  
46 human and physical capital. Likewise, gender-related injustice also impede proper human capital  
47 management. It appears that there are some degree of control which may potentially influence the  
48 effect of some resources on organisation's financial achievement. It is plausible to propose that the  
49 effect of the two key resources on financial condition is presumably moderated by the level of  
50 control.  
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1 Human and Physical Capital depend on the degree of control applied by organisational  
2 management. Management Control becomes much more important in ensuring that the human and  
3 physical resources are in place to support financial condition. Anthony and Govindarajan (2005)  
4 stated that "Management control is a process by which managers influence other organizational  
5 members to imply the organizational strategies". It is also a process of detecting and correcting  
6 errors for accidental or intentional work. Since its focus is on humans and implementing plans,  
7 management control requires strong psychological considerations. Activities such as  
8 communication, advising, encouraging and criticizing are important parts of this process.  
9

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12 Management control utilizes task control to ensure the kind of effective and efficient work  
13 by considering three important areas namely budgeting, economic value added, and balance  
14 scorecard (Otley, 1999). Efficient describes how many inputs are needed to produce a unit of  
15 output while effectiveness is defined as the ability of a unit to achieve the desired goals. The most  
16 efficient organizational unit is the one that can produce a number of outputs with the use of  
17 minimal inputs or produce the most output with the available inputs.  
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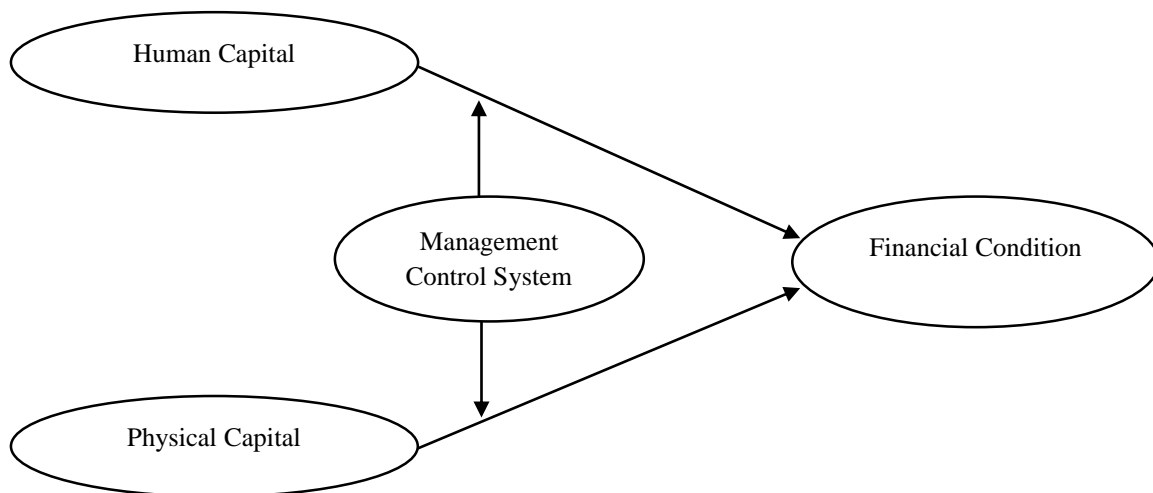
19 Control Theory of Strategic Human Resource Management (Snell, 1992) proposed that as  
20 an organisation expects certain level of performance, it must implement high degree of control  
21 over human resource management particularly when the goals and incentives are less clear. This  
22 theory also suggests that control depends on the degree of standard exhibited by organisations. As  
23 goals and incentives are less known and the cause-effect knowledge of management seems blur,  
24 high control is highly needed. Organisations may suffer from underachievement performance or  
25 serious issues related to organizational attainment.  
26

27 The same case also applies for the financial condition. Using this Control theory  
28 perspective, public sector financial condition in the regional level potentially requires some degree  
29 of control in managing Human Capital and Physical Capital. The control should start from input,  
30 behavioural, and finally outputs. Human Capital management could support financial condition  
31 when the input (e.g. recruitment and selection) is practiced with systematic control. Behavioural  
32 control is related to personnel's behaviours which also require control to direct personnel towards  
33 targeted goals. Output control means organisation, stakeholders, and employees should have a  
34 crystalized standard of desired output and this standard is deemed to guide human capital  
35 management. Thus, the higher control implemented by the organisations, the more positive the  
36 effect of Human Capital on Financial Condition.  
37

38 Physical capital also demands certain control in order to bring positive impact on financial  
39 condition. As proposed by the Control theory (Snell, 1992), clear and crystalized standard is  
40 important in developing control. Thus, certain degree of control is essential to ensure that the  
41 physical resources is utilized to supporting organisation goals. According to the theory, input,  
42 behavioural, and output control are three elements of control system. Physical Capital should also  
43 be controlled using this concept. Organisations with high degree of physical resource control  
44 would carefully consider physical input, control personnel behavior in using physical assets or  
45 resources, and physical utility output would be evaluated with caution. By implementing this  
46 system the positive effect of Physical Capital on Financial Condition will be considerably  
47 improved.  
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1 Latham and Locke (1979) also have strengthened the argument that high degree of control  
2 may cause the financial resources (i.e. human and physical capital) are even impactful. The goal-  
3 setting theory (Latham and Locke, 1979; Locke et al., 1981; Tosi et al., 1991) postulates that clear  
4 and specific goals are proven to be more effective than “do your best” goals. The goals impact  
5 organisation as the degree of clarity is high and this also apply for financial condition. Organisation  
6 could perform a better financial condition as the control over Human and Physical Capital are more  
7 standardized and crystalized. Similarly, Snell (1992) found that clear standard played important  
8 role in developing a better control system.  
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12 Given the important role of control, this study proposes a management control system to  
13 control how the strategy in the company runs according to plans and objectives. According to  
14 Purnamasari (2009) which stated that to encourage companies to be able to compete in increasingly  
15 fierce global competition, the management control is an absolute requirement that must be  
16 conducted by the professional managers. It is a process and structure which systematically  
17 arranged by management in controlling activities so that the goals and objectives set by the  
18 company can be achieved. Therefore, Management Control System will moderate the effect of  
19 Human and Physical Capital on Financial Condition.  
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Figure 1. Theoretical Framework

### 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 **Hypotheses**

Based on this framework, a conceptual framework is developed for this research as follows:

H1: Human Capital has a positive effect on the Regional Financial Condition.

H2: Physical Capital has a positive effect on the Financial Conditions.

H3: Management Control System moderates the relation between Human Capital and Financial Conditions

### **METHOD**

1 **Participants**

2 Participants were employees of the Regional Financial and Asset Management Agency  
3 who were the Financial Report Compilation team in the Golden Triangle area of South Sulawesi.  
4 The South Sulawesi Golden Triangle region was actually formed from a path connecting three  
5 regencies and big cities (Makassar, Gowa and Maros). Participants worked as Secretary,  
6 Budgetary, Treasury, Accounting and Information Technology and Regional Assets. This study  
7 took 5 people in each field which chosen randomly so that 25 samples per region could be obtained,  
8 and amount of 75 samples were obtained from three gold triangle regions. The number of female  
9 participants were 53% and male 47% with most participants had bachelor degree (81%).  
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14 **Measures**

15 This study used scale which were developed by the researchers in accordance with the  
16 theory of each variable. There are four measuring instruments in this study. The following table  
17 describes the construction of the measure:  
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22 Table 1. *Operational Variable*

Variable	Dimension	Indicator
<i>Human Capital</i> (Mignonedan O'Neil, 2005)		Special Competence Work Experience Skill
<i>Physical Capital</i> (Baldi, 2013)		Availability of Natural Resources and the Environment Government Investation Facilities and Infrastructure (Computer and Internet Networks)
Management Control System (Prabawati, 2010)		Strategic Planning Implementation and Measurement Evaluation
Financial Condition (Dinapoli, 2011)	Environment	Community needs Population Property Value Inflation Individual income Budgeting
	Organization	Budget Cost Timeliness and accuracy of financial transactions Quality and timeliness of financial reporting
	Financial	Limitation of Debt Potential Taxes Legality of Expenditures

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The measures were developed in Indonesian using a 5-point Likert scale (1= Strongly Disagree to 5= Strongly Agree). The results showed that the data had four independent

constructs confirming the proposed theoretical model. Outer loading value indicated that the convergent validity of the data had coefficients above 0.50 for each item and the t-value for each item above 1.96. In addition, the value of Average Variance Extracted (AVE) in each construct variable was greater than 0.50. Based on the results of the analysis, all constructs fit into the convergent validity criteria. Those can be seen in the following table:

Table 2. *Average Variance Extracted (AVE)*

Variabel	AVE
Human Capital	0.617
Physical Capital	0.600
Management Control System	0.534
Financial Condition	0.702

Source: Primary data

The reliability test aims to see the composite reliability of each variable construct and also showed the appropriate value. The results suggested that the constructs had composite reliability coefficients above 0.70. So, it can be concluded that the construct had acceptable reliability.

Table 3. *Composite Reliability*

Variable	Composite Reliability
Human Capital	0.826
Physical Capital	0.818
Management Control System	0.931
Financial Condition	0.976

Source: Primary data

### ***Procedure***

The data were collected by using a questionnaire which were developed in Indonesian. Data collection was conducted using a three-wave data collection technique to avoid common method bias. In the first phase, researchers collected demographic, human capital and physical capital data. After a week, researchers then collected data for the Management Control System and the following week the Financial Condition data. Participants were asked to commit to filling out the questionnaire from the beginning to the end of the data collection which lasted for one month. All participants (75, 100%) fully participated in the study from the beginning to the end of the data collection.

## **RESULTS AND DISCUSSION**

### ***Results***

This study conducted several stages in the data analysis. First, the data were analyzed descriptively. Secondly, the relation between the variables were tested with Product Moment correlation. Lastly, the Hierarchical Moderated Regressions test was conducted.

Table 4. *Descriptive Statistics and Bivariate Correlations*

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
Human Capital	11.43	1.21						
Physical Capital	11.79	1.23	.52**					
MCS	12.12	1.15	.45**	.54**				
FC(Environment)	22.90	2.52	.53**	.56**	.73**			
FC(Institution)	12.17	1.22	.30**	.34**	.62**	.78**		
FC(Financial)	12.26	1.35	.46**	.46**	.67**	.72**	.64**	
FC Total	47.33	4.63	.50**	.53**	.76**	.86**	.87**	.85**

Note: *N*= 75, *M*= Mean, *SD*= Standard Deviation, MCS= Management Control System, FC= Financial Condition, \*\*  $p < .01$

Table 4 above showed the average values and standard deviations for each variable in the study. In addition, the relation between variables was presented in the form of product moment correlation coefficient. Based on the analysis of that relation, it was generally concluded that all variables in the study were positively and significantly correlated. The level of relation between these variables ranged from  $r = .34$  ( $p < .01$ ) to  $r = .86$  ( $p < .01$ ). The Human Capital had a fairly strong correlation with the Financial Condition ( $r = .50$ ,  $p < .01$ ) and so did the Physical Capital ( $r = .53$ ,  $p < .01$ ). The relation between the Management Control System and the Financial Condition was even stronger with the correlation coefficient which reaching  $r = .76$  ( $p < .01$ ). The results indicated that the two independent variables (i.e. Human Capital and Physical Capital) and Management Control System as moderator variables had a strong positive relation with Financial Condition.

After knowing the relation between variables, then the Hierarchical Moderated Regressions analysis was performed. The following were the results of the analysis:

Table 5. *Moderated Regressions with Financial Condition as Dependent Variable*

Model		$R^2$	<i>Adj. R</i> <sup>2</sup>	$\Delta R^2$	$\Delta F$	$\beta$
1	Human Capital	.25***	.24	-	24.81	.50***
2	Human Capital Physical Capital	.35**	.33	.10**	10.86	.31** .37**
3	Human Capital Physical Capital HC*MCS	.36**	.34	.01	1.47	.32** .37** -.12
4	Human Capital Physical Capital HC*MCS PC*MCS	.43**	.40	.06**	7.98	.33** .33** -.33** .34**

Note: *N*= 75,  $\Delta$ = change,  $\beta$ = Standardized Beta Weight, HC= Human Capital, PC= Physical Capital, \*\*\*  $p < .001$ , \*\*  $p < .01$

1 Hierarchical Regression Analysis with moderated regression was performed. This analysis  
2 technique allowed researchers to capture the incremental contribution of each variable which  
3 entered in the model. The first model, with Human Capital as the only predictor, showed a  
4 significant impact on the Financial Condition ( $Adj. R^2 = .25, p < .001$ ). In the second model,  
5 Physical Capital entered and contributed a positive and significant *added value* to the Financial  
6 Condition prediction model ( $\Delta R^2 = .10, p < .01$ ). In model 3, the interaction between Human Capital  
7 and Management Control System did not significantly increase the predicted value of the Financial  
8 Condition ( $\Delta R^2 = .01, p > .05$ ). Model 4 was the regression model that gave the highest contribution  
9 to the variance of the Financial Condition in the presence of the additional interaction variables of  
10 Physical Capital and Management Control System ( $\Delta R^2 = .06, p < .01$ ).

11 The analysis showed that the impact of Human Capital on Financial Condition was proven  
12 to be positive and significant across all regression models. When there were no other variables in  
13 the model, the impact of Human Capital on Financial Conditions tended to be strong ( $Adj. R^2 =$   
14  $.24, \beta = .50, p < .001$ ). The impact of Human Capital on Financial Conditions remained positive  
15 and significant across all the regression models, including in model 4 ( $Adj. R^2 = .40, \beta = .33, p$   
16  $< .001$ ). Based on these results, the H1 was accepted which meant the Human Capital had a positive  
17 effect on the Financial Condition.

18 The presence of Physical Capital to predict Financial Condition also had a positive impact  
19 on all regression models. In model 4, Physical Capital had the same effect as Human Capital ( $Adj.$   
20  $R^2 = .40, \beta = .33, p < .001$ ). This perceived that H2 was accepted, which meant that Physical Capital  
21 affected the Financial Condition.

22 In model 4, the interaction between Human Capital and Management Control System  
23 contributed negatively to Financial Condition ( $R^2 = .10, p < .01$ ). It meant that the impact of Human  
24 Capital on Financial Conditions depended on the high or low Management Control System ( $\beta = -$   
25  $.33, p < .01$ ). The higher the Management Control System then the lower the impact of Human  
26 Capital on Financial Conditions, and vice versa. This finding supported the research hypothesis  
27 (H3) which stated that the Management Control System moderated the relation of Human Capital  
28 to Financial Conditions.

29 The interaction between Physical Capital and Management Control System also showed a  
30 significant impact on the Financial Condition ( $\beta = .34, p < .001$ ). The impact of these interactions  
31 tended to be positive which meant that Physical Capital would increasingly have an impact on the  
32 Financial Condition when the Management Control System is high, conversely if a low  
33 Management Control System could reduce the impact of Physical Capital on the Financial  
34 Condition. These results were in accordance with the previously proposed H4.

35 The theoretical model which carried by the researcher was in accordance with empirical  
36 data which found with the suitability of the regression model up to  $R^2 = .43$  ( $p < .01$ ) which meant  
37 that the regression model could predict 43% of the variance of the Financial Condition.

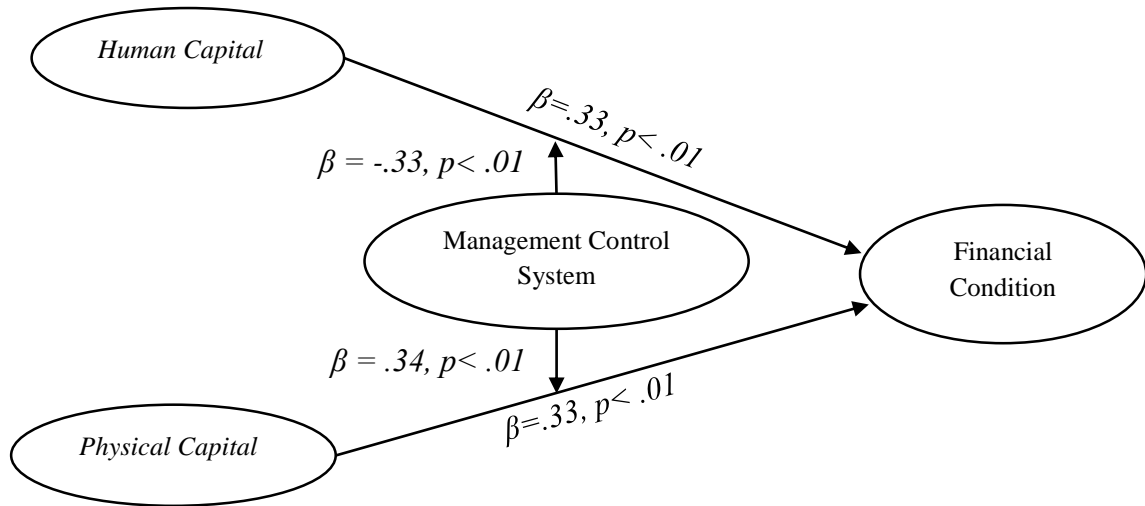


Figure 2. Empirical model and coefficients

Figure 3 below illustrates the interaction between Human Capital and Management Control Systems in predicting Financial Conditions. The graph explained that the value of the prediction model was higher when the Management Control System was at a low level ( $R^2 = .156$ ), compared to when it was at a high level ( $R^2 = .131$ ). So that the existence of a high Management Control System could reduce the impact of Human Capital on Financial Conditions.

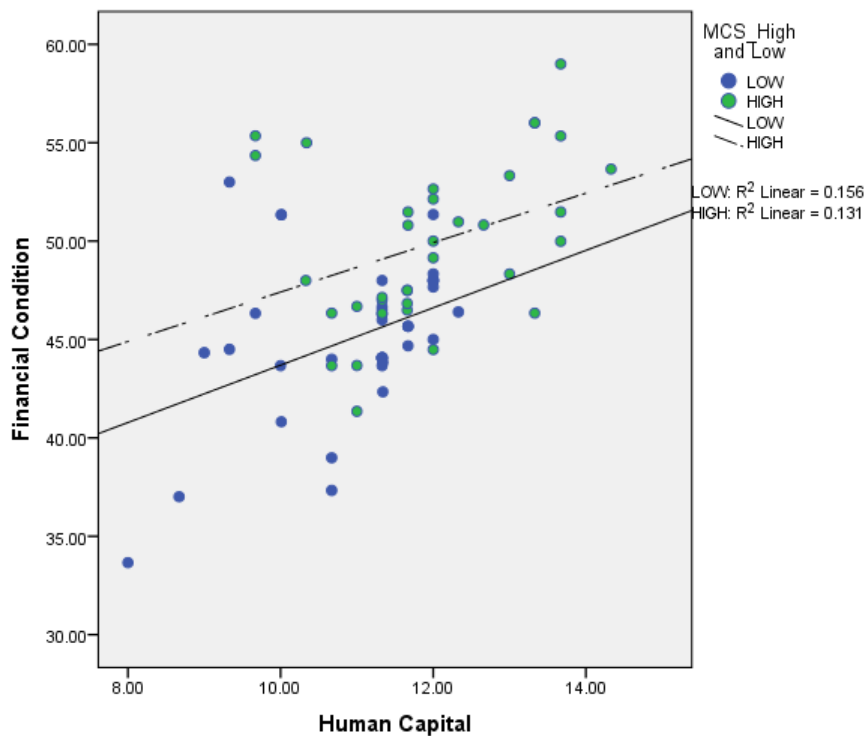


Figure 3. Interaction between Human Capital and Management Control System

The interaction between Physical Capital and Management Control System can be seen in Figure 4. Unlike the previous interactions, the interaction in figure 4 showed that the impact of

Physical Capital on Financial Conditions was stronger when the Management Control System was also at a high level ( $R^2 = 0.217$ ), compared when dealing at low levels ( $R^2 = 0.071$ ). A high Management Control System could support the positive impact of Physical Capital on Financial Conditions. The low Management Control System could result in the low impact of Physical Capital on Financial Conditions.

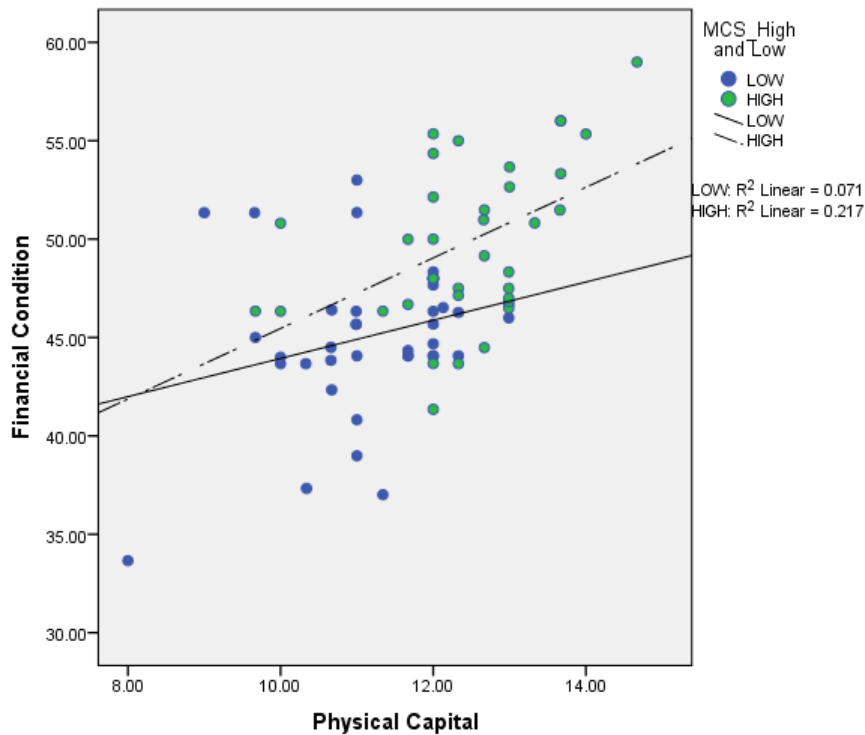


Figure 4. Interaction between Physical Capital and Management Control System

## DISCUSSION

### *The Effect of Human Capital on Financial Conditions*

The analysis showed that Human Capital had positive influence on Financial Conditions. Based on the analysis, the higher Human Capital in the terms of special competencies, work experience and skills, the more likely financial condition leverages in Makassar, Gowa and Maros. This suggests that Human Capital affects environmental, institutional, and financial conditions of these three areas. In this study, a successful financial condition referred to environment, institution and finances dimensions in three key areas of South Sulawesi (i.e. Makassar, Gowa and Maros). Firstly, within the environmental dimension there were community needs, populations, property values, inflation, individual income and budgeting, all these necessary to establish a stable financial condition. Secondly, human resources also contribute to institutional dimensions of financial performance. Human Capital aspects supports the organisation strategic in which there was availability of budget, timeliness and accuracy of financial transactions and the quality, and timeliness of financial reporting. Lastly, the workforce competence also provided supports for the financial dimension which included debt limits, tax potential and legality of expenditure. Successful financial dimension, in this regard, relied upon the workforce competence. Human capital serves a means to monitor debt limits and tax management, for example. So the increase or

1 decrease in Human Capital had an influence on the Financial Condition of the government in these  
2 regions. Similar research was also found by Zulkifli (2018), Ramli et al. (2014), Nimtrakoon  
3 (2015), Ervina et al. (2008), Is et al. (2014), which stated that Human Capital had a positive effect  
4 on Financial Conditions.  
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6 The RBT (Barney, 1991, 2001) has explained the importance of valuable and rare resources  
7 in fostering organisation competitive advantages. Human Capital also acted as a valuable resource  
8 for organizational success which also includes financial achievement within organisation. As the  
9 organisation maintains sufficient quality of Human Capital, the workforce will strive to facilitate  
10 sustainable financial performance. Thus, according to this study, the RBT successfully explained  
11 the role of Human Capital in predicting Financial Condition.  
12

13 Special competence, work experience and skills became important points in improving  
14 Financial Conditions because with those could be an important part in improving innovation,  
15 strategies and objectives of the organization. Participants assumed that the development of human  
16 capital was also able to increase the ability of an area in improving the economy and maximizing  
17 its potential, but this study assumed that it is unable to affect the company's Financial Condition.  
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19 This research reinforced the notion that the role of Human Capital in a government needed  
20 to be considered because the better Human Capital was able to strengthen the achievement of the  
21 objectives of an area. The fulfillment of the needs of the residents of an area could be improved  
22 with the support of good Human Capital.  
23

### 24 ***The Effect of Physical Capital on Financial Conditions***

25 The results showed that Physical Capital had a positive effect on the Financial Conditions.  
26 The level of Physical Capital in terms of the availability of natural resources and the environment,  
27 government investment, facilities and infrastructure (e.g. computers, internet access) had a  
28 significant impact on the fulfilment of the environmental, institutional, and financial sectors in the  
29 government areas of Makassar, Gowa and Maros. Physical Capital contributed positive impact on  
30 leveraging the areas' Financial Condition which also included fostering environmental,  
31 institutional, and financial aspects.  
32

33 As mentioned earlier, there are there distinct dimensions namely the environment,  
34 institutions and finances. These three aspects were applied to depict financial achievement of local  
35 government in South Sulawesi (i.e. Makassar, Gowa and Maros). In leveraging financial condition,  
36 the governments should scrutinize the community needs, populations, property values, inflation,  
37 individual income and budgeting. The second dimension was the institution in a sense that there  
38 was budget availability, timeliness and accuracy of financial transactions, and the quality and  
39 timeliness of financial reporting. The third dimension was finance which covered debt limits, tax  
40 potential and legality of expenditure.  
41

42 The RBT has supported that Physical Capital (e.g. technology) has provided valuable  
43 resources for the governmental organisations in South Sulawesi, Indonesia. The theory and  
44 previous findings have been supported by this empirical study. Physical Capital had significant  
45 positive influence on the Financial Condition of the government in these three regions; Makassar,  
46 Gowa and Maros. Barney (2001) proposed that competitive advantages of an organisation can be  
47 achieved by utilizing existing valuable and rare resources in organisation. Consistently, in the case  
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1 of local government organisations in Indonesia, it appeared that Physical Capital added significant  
2 amount of incremental variances to the development of Financial Condition. Physical assets,  
3 technologies, devices and other facilities were viewed as the essential elements of successful  
4 Financial Conditions.  
5

6 This study was also in line with research conducted by Zulkifli (2018), Nimtrakoon (2015),  
7 Ervina et al. (2008), Is et al. (2014). However, the effect could be indirect as other variables also  
8 might also influence the relationship. For example, Nirvana et al. (2014) discovered that Cultural  
9 Capital moderated the Physical Capital - Financial Conditions relationship. Therefore, this study  
10 also considered testing the effect of Management Control System in moderating the effect.  
11

12 Limitations of Physical Capital were often became a problem of a local government  
13 regardless the quality of Human Capital. Generally, regions that had outstanding human capital  
14 would be more developed if juxtaposed with the availability of natural resources and the  
15 environment, adequate government investment, facilities and infrastructure (e.g. computers). It  
16 seems in this study, the participants considered that Physical Capital in a form of technologies,  
17 facilities and infrastructures provide significant supports for Financial Condition.  
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### 23 ***The Moderation Effect of Management Control System on the Relation of Human Capital and*** 24 ***Financial Condition*** 25

26 Apart for the direct effect of Human Capital on Financial Condition, this study also found  
27 that Management Control System moderated the effect of Human Capital on Financial Condition.  
28 This research was supported by the Control Theory (Snell, 1992) as the theory stated that managing  
29 human resources must be supported with input, behavioural, and output control. In addition, the  
30 Control Theory and the Goal Setting (Latham and Locke, 1979) postulated that clear and  
31 crystalized standard potentially emphasize the effect of resources. In addition, the goal setting  
32 principles have stressed enough on the importance of specific and clear goals. Say it differently,  
33 the theoretical background has assumed that a company with supportive human resources but zero  
34 goals and rules would experience constraints to rise the Financial Condition.  
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39 This study discovered an interesting findings related to the moderation effect of the  
40 Management Control System. The presence of a lower degree of Management Control System  
41 could trigger improvement in local government organisation. In contrast, high degree of  
42 Management Control System would reduce the effect of Human Capital on Financial Condition.  
43 The theories have supported that Management Control System facilitated the Human Capital –  
44 Financial Condition relationship. The moderating effect seems to be more positive as the theories  
45 suggested that clear and standardized goal of Human Capital management could improve Financial  
46 Condition. However, this study showed opposing evidence as the moderating effect was found to  
47 be negative. This indicated that the existence of Management Control System could weaken the  
48 role of Human Capital on Financial Condition.  
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53 In the local government areas, Human Capital significantly determined the fluctuation of  
54 Financial Condition. However, as the Management Control System implemented with  
55 considerably high degree of input, behavioural, and output control, Human Capital would be less  
56 influential. The Management Control System improves the Human Capital management by  
57 standardizing control over the input quality, specifying work behaviour, and directing control to  
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1 attain desired output. The government officials could have perceived Human Capital as an  
2 insignificant resource as the management of the human resources was highly controlled. Simply,  
3 the local governments could discarded the importance of Human Capital for Financial Condition  
4 as they perceived high Management Control System.  
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7 The results of this study were in line with the research conducted by Chandra (2017), Ong  
8 et al. (2016), Rachma (2014) where they all found that the Management Control System had a  
9 significant influence on Human Capital and Financial Conditions. However, despite the effect,  
10 scholars and government officials should consider how the Human Capital and Management  
11 Control System interact to predict Financial Condition. In terms of predicting the local government  
12 Financial Conditions, as the degree of Management Control System increases the Human Capital  
13 impact on Financial Condition declines. Thus, Organisations that have a poor Management Control  
14 System may require high quality of Human Capital.  
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### 19 ***The Moderation Effect of Management Control System on the Relation of Physical Capital and*** 20 ***Financial Condition*** 21

22 The results of this study also indicated that the Management Control System was able to  
23 moderate the effect of Physical Capital on Financial Conditions. The relation between Physical  
24 Capital and Financial Conditions is increasing as the Management Control System included in the  
25 prediction model. As predicted previously using the Control Theory by Snell (1992), high degree  
26 of control over input, behaviour, and output also improve the quality of Physical Capital. In this  
27 respect, Physical Capital could be more influential as the Management Control System ensure its  
28 quality by controlling input of physical resources, controlling behaviours in utilizing the resources,  
29 and directing the outputs of using the resources. As the Management Control System increases, it  
30 improves the effect of Physical Capital on Financial Condition.  
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35 Unlike the former moderating effect, Management Control System and Physical Capital  
36 went hand-in-hand in predicting Financial Condition. It indicated that the effect of Physical  
37 Resources on Financial Performance depended on the degree of control in organisation.  
38 Organisations with abundant of Physical Resources may not always provide high performing  
39 Financial Condition unless they implement high state of Management Control System. This shades  
40 the light on the importance of Management Control System in supporting the role of Physical  
41 Capital. Hypothetically, if the organisations tend to have less Physical Resources, managing the  
42 resources using the Management Control System principles will accentuate the effect of the  
43 resources on the organisations' Financial Condition.  
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47 The results were in line with some previous investigations conducted by Chandra (2017),  
48 Ong et al. (2016), and Rachma (2014). In those studies, Management Control System was one of  
49 predictors of Financial Performance in organisations. The effect of Management Control System  
50 is important as it serves as control over resources quality. Anthony and Govindarajan (2005) stated  
51 that Management Control System was also a process for detecting and correcting errors at work.  
52 The focus is on human behaviours and the implementation of plans. The focus on behavioural  
53 control also requires a strong psychological aspects.  
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57 In the local government organisation, the three golden areas of South Sulawesi may have  
58 relied on the level of Management Control System to attaining expected level of Financial  
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1 Condition. In this regard, the government official should strive to optimize the control over the  
2 physical resources. The control system should manage the selection of equipment, human  
3 behaviours related to the application of the equipment, and it also should monitor the effect of  
4 certain technologies or devices on outputs. Physical Capital positively predict the local government  
5 Financial Condition as far as the physical resources controlled with systematic procedure starting  
6 from input to output.  
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### 10 ***Implications***

11 This research empirically examined the influence of moderating effect of Management  
12 Control Systems on the two local government financial condition antecedents; Human and  
13 Physical Capital. The results provided supports that perceived Management Control System  
14 significantly determined the effect of Human Capital and Physical Capital on Financial Condition.  
15 However, this moderator behaved differently towards Human and Physical Capital. Management  
16 Control System tended to alter the low quality of Human Capital while at the same time strengthen  
17 the Physical Capital – Financial Condition Relationship.  
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22 In a case where the local governments implement high Management Control System, the  
23 Physical Capital will be more likely to foster Financial Condition. Unfortunately, this condition  
24 will also reduce the Human Capital effect on Financial Condition. Albeit the organisations have  
25 exhibited sufficient workforce competence, it will have less impact on the Financial Condition as  
26 the Control System is highly managed. Presumably, outstanding Human Capital can tolerate a poor  
27 Management Control System and still positively impacts Financial Condition. Control System is  
28 important for directing the effect of resources on Financial Condition. However, the local  
29 government officials, in this case, should be aware that increasing control over Human Capital can  
30 reduce the effect of human resources on Financial Condition. Human Capital in the local  
31 government areas may not have less impact on financial performance as the organisations  
32 implement high control system.  
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### 39 ***Limitations and Future Research Directions***

40 This study employed a set of questionnaire as valid and reliable measures of variables being  
41 studied. The initial attempt was to collect objective data. However, the existing objective data were  
42 not adequately standardized across different organisations. The data were also strictly prohibited  
43 for non-official parties. Likewise, researchers cannot find alternative objective data that definitely  
44 measured the level of achievement of the whole existing variables, other than the opinions of  
45 employees who work in the organization. This study, then, employed Subject Matter Experts  
46 (SMEs) perception towards each variable in the study and this procedure was supported by the  
47 authorities. Therefore, future studies can repeat this method using objective data sources from  
48 government officials by establishing mutual collaborations.  
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53 Furthermore, although this research succeeded in involving representatives from all  
54 agencies with varying levels of position, the number of participants involved was still small  
55 compared to some previous studies. By increasing the number of participants and involving more  
56 governmental organisations, the future studies would provide more information regarding the  
57 effect of control system in organisation.  
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3 **CONCLUSIONS**

4 This study has two folds. Firstly, it contributed a new information related to the effect of  
5 two key resources (i.e. Human and Physical Capital) on financial performance in governmental  
6 organisations. Secondly, this study broaden our understanding towards the unique role of  
7 Management Control System in the local government organisations in South Sulawesi, Indonesia.  
8 The first part of the findings was consistent with the RBT as both Human and Physical Capital  
9 significantly predicted Financial Condition. However, the second part of the findings was mixed  
10 as Management Control System negatively moderated the effect of Human Capital while at the  
11 same time also positively moderated the effect of Physical Capital on Financial Condition. This  
12 study highlighted the importance of improving the standard of control system in managing the  
13 local government organisations. Although it potentially reduces the effect of Human Capital, high  
14 degree of control will help organisations to maintain desired Financial Conditions.  
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## Research article

# The effect of human capital and physical capital on regional financial condition: the moderating effect of management control system

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 The corrections made in this section will be reviewed and approved by a journal production editor.

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## Abstract

This study examines the effect of Human Capital and Physical Capital on Regional Financial Condition with a Management Control System as moderator. Participants were employees of the Regional Financial and Asset Management Directorates located in three major cities in the province of South Sulawesi, Indonesia. The participants were recruited from three different regions resulting in 75 participants in a three-wave data collection procedure. Four measures were developed (i.e. Human Capital, Physical Capital, Management Control System, and Financial Condition), which were constructively valid and reliable for research purposes. The results showed that Human Capital and Physical Capital directly influenced the Financial Condition. The effect of Human and Physical Capital was moderated by the Management Control System. Management Control System negatively moderated the effect of Human Capital while at the same time also positively moderated the effect of Physical Capital on Financial Condition. This study collected participant's perceptions towards the study variables without any further investigation to the objective measures. Although some scholars may find this as the lack of evidence against the actual Financial Condition, acknowledging experts' perceptions should provide a better understanding of the experienced Financial Condition. Various studies have investigated some factors which may affect Financial Condition. However, this study proposed an examination of the role of the Management Control System. In this case, a capital that is owned by the financial organisations cannot provide a direct impact on the Financial Condition without the role of the Management Control System.

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**Keywords:** Human capital; Physical capital; Management control system; Financial condition; Indonesia

## 1 Introduction

Financial Condition is determined by the ability of an area to fulfil an obligation for prospering or serving a community. In this regard, there are three core dimensions to evaluate the Financial Condition they are environmental, institutional and financial dimensions (DiNapoli, 2011). These three dimensions will be interconnected to produce a proper

Financial Condition. By fulfilling all these dimensions, the government will be able to bring more stable Financial Condition.

Firstly, the environmental dimension is the assessment of Financial Condition based on how a government supports or impedes regulations, especially on bringing innovations to the community. Secondly, the institutional dimension is a management practice and legislative policy which guides financial decision making. Its function is often as a response to environmental or political factors (DiNapoli, 2011). Lastly, the financial dimension is most related to financial performance. This particular dimension includes potential tax or incomes in a particular region and a debt limit and legality of expenditure from a region. For some countries, it also consists of fiscal decentralisation management in which each region will obtain a budget for the funds to be managed.

One of the most important questions to this issue is that what are variables may potentially predict Financial Condition. Research in this area has investigated some determinants of Financial Condition and performance. In Indonesia, the type of firm, independent board, gender diversity, and location of director can determine financial distress (Kristanti et al., 2016)(2019). [Instruction: I could not find a proper way in the system to link the citations with the new references. Please correct if this not how you properly do in-text citation.] On the other hand, a study also revealed that the Capital Adequacy Ratio, Credit Interest Income, and size of the organisation or corporate had a positive effect on financial performance (2015). (Elishaday et al., 2018). In some public organisations, the political system played a significant role in financial Condition (Garcia-Sanchez et al., 2012)(2015). Some scholars also suggested that cost-efficiency and effective financial management could determine Financial Condition (Cuadrado-Ballesteros and Bisogno, 2018)(2015); Zafra-Gómez et al., 2009, 2010(2015,2016)). Although some predictors of financial Condition have been revealed, these studies merely focused on the system and management of financial performance. Human resources and other resources have not received much attention, even though organisations demand a certain level of resources to perform effectively.

**Q2** Considering the important roles of resources, the Resource-Based Theory (Barney, 1991) supports the notion that Human Capital and Physical Capital provides significant resources for maintaining Financial Condition. Human capital becomes considerably important because it is a source of innovation and strategy renewal. Human Capital is related to any knowledge, skills, abilities and attitudes owned by personnel in organisations that are highly supportive for organisational success (Perrotta, 2018). Further, it can be fostered from applied research, management objective, reengineering process and improvement or development of workforce skills. Furthermore, Human Capital creates incremental values to organisations daily via motivation, commitment, competence and effectiveness of teamwork. However, each organisation offers distinctive approaches to managing Human Capital, which also means different values (Lepak and Snell, 2002(2017)). Thus, human capital provides unique contributions to Financial Condition based on unique approaches given by the organisations.

In addition to Human Capital, Physical Capital also adds incremental variance to the successful Financial Condition. The notion of Physical Capital includes natural resources and other technological devices (Galor and Moav, 2004). The existence of Physical Capital supports the improvement of the Financial Condition of an area. To illustrate, the development of the primary physical conditions such as sanitation, clean water, and electricity in an area will also help foster the services and welfare for the community, which may later improve Financial Condition. Physical Capital is also helpful for creating additional values to producing desired input. Thus, it is reasonable to conclude that both human and physical resources act together to influence a region financial condition.

The direct effect of these two capitals (i.e. human and physical) may have been moderated by the level of control performed by the organisations. In Indonesia, some empirical investigations conducted by Chandra (2017) and Sari and dan Fitriani (2009) found that the management control system improved Financial Condition. In these two studies, Human Capital and Physical Capital directly impacted financial performance where the organisations had sufficient control over the resources. As a result, the organisations performed better and showed expected Financial Condition.

The concept of Control theory in strategic human resource management from Snell (1992) has provided a clear argument on how high control facilitates the positive effect of human capital and physical capital on desired Financial Condition. According to the theory, Human Capital and Physical Capital will leverage financial performance only if an organisation implement a certain degree of control over human capital inputs, behavioural controls, and desired outputs. This further suggests that possessing a management control system favours Human and Physical Capital's effect on Financial Condition.

Accordingly, management control system becomes a moderating variable in creating good Financial Condition for one particular region. In a developing country like Indonesia, the management control system is one of the most vital foundations of good governance (Budiawan and Purnomo, 2014). The internal control system includes various management tools that aim to achieve a broad range of objectives. Besides, Riawan (2016) stated that the management control system could improve an organisation's Financial Condition. Meanwhile, Masyur (2015) postulated that local governments encounter difficulties implementing a good control system strategy because of the absence of synergy between Human Capital and the control strategy. Subsequently, this made the public services become less efficient. Control becomes a crucial element to ensure that Financial Condition is achieved as expected.

The management control system consists of management control structures and processes (Halim et al., 2003). The control structure is centred on a variety of responsibility, while the management control process includes budget preparation, implementation and measurement, reporting, and analysis. In management control, the decisions are made based on the procedures and other schedules carried out repeatedly year after year. Those procedures usually start from programming. The program is translated into a budget, and then the company operates based on a predetermined budget, procedure and policy. The final results are then compared with the budget after being evaluated and improved if necessary. Since the procedure is carried out repeatedly every year, then management requires a management control system to improve its performance so that the company's goals can be achieved.

By applying the Resource-Based Theory and Control theory in Strategic Management, one should capture that the presence of high management control will leverage the effect of human and physical capital on financial Condition. However, some contextual conditions may also influence this argument. For instance, as a developing country, Indonesia implements a decentralisation policies that also include financial autonomy for its provinces. Consequently, some experts and practitioners have questioned some antecedents related to regional financial performance.

Indonesia's Regional Law No. 23 of 2014 states the implementation of regional government directed to accelerate the realisation of community welfare through improving services, empowerment, and community participation, as well as enhancing regional competitiveness by taking into account the principles of democracy, equality, justice, and uniqueness of the area in the system of the Unitary State of the Republic of Indonesia. Regional autonomy is a part of decentralisation. It constructs each region to have the right and obligation for regulating their area but with the control of the central government and following the law. Fiscal decentralisation is implemented in order to encourage several levels of government that can control each region. The local governments will accommodate the aspirations of a community. The success of regional autonomy is integrated with the ability of a region to manage the funds. Also, the local governments should be able to utilise the resources that are already owned by the region. Therefore, the success of a regional autonomy significantly is related to the Financial Condition of the region.

Unfortunately, contrasting views emerged regarding Human Capital and Physical ~~Physicial~~ Capital's effect on Financial Condition in Indonesia. For instance, Nirwana et al. (2014) found that Human Capital and Physical Capital had a non-significant influence on Financial Condition. However, they found it emerged after intervening through the culture. At the same time, Zulkifli et al. (2018)(2018) found contrasting findings where Human Capital and Physical Capital positively affected Financial Performance. Another finding suggested that the differences were caused by the influence of Indonesia's national culture. The level of uncertainty was higher in Indonesia than in Australia, which later reduces any resources on financial performance (Graham and Sathye, 2017).

Additionally, pressure from the central government has imposed some policies in managing the budget in local government. Although provincial governments had adapted a new accounting system, the local officials found it difficult to maintain a well-controlled and structured system (Harun and Kamase, 2012). In a similar vein, Mir and Sutyono (2013) have discovered that the demand, supply, and quality of Indonesia's local accounting system lacked parity, which also means the financial system implemented less effective control. This, then, causes a subsequent effect on the local financial performance as effective decision-making and efficient management would be difficult to implement. Thus, in this situation exhibiting an effective control in managing resources lead to better financial performance.

This investigation is necessary to understand further the antecedents of Financial Condition and the role of effective management control. This study will also shed light on the importance of human and physical capital in developing regional financial Condition. Local governments in Indonesia may have undergone less effective control over the accounting system and failed to address the issue since their financial reports were in a category of acceptable without

exceptions. Sulawesi Selatan, in this case, acted as the main gate of Eastern Indonesia, where many essential businesses happen. Despite the prestigious Financial Condition, this local government was imposed to implement regulation from the central government. Additionally, some resources may have been used to support the financial performance. However, more empirical information is necessary to explore whether those resources influence Financial Condition or not.

Then, the theory and empirical evidence led this study to exert a management control system as its moderating variable on observing the influence of Human Capital and Physical Capital on the Financial Condition of the area chosen in this study. Fiscal decentralisation is a government policy to increase the ability of an area to manage its region. The local governments faced difficulties implementing effective control system strategy because they were unable to link the relationship between Human Capital and the control strategy. As a result, it caused the public services became less efficient.

Having considered the above discussions, the research objectives are formulated as follows;

1. To examine the effect of Human Capital on Regional Financial Condition
2. To examine the effect of Physical Capital on Regional Financial Condition
3. To examine the moderating effect of the Management Control System on the effect of Human Capital and Physical Capital on Regional Financial Condition.

## 2 Literature review and hypotheses

The Public Sector Accounting Board (2007) defined the Financial Condition as the health of government financial performance indicated by their ability to fulfil the financial obligations and the service commitments to the public, creditors, employees and others. According to [DiNapoli \(2011\)](#), Financial Condition is the ability of the local governments to comply with the expenditure budget by taking the source of local revenue and continue providing services to the community.

Financial factors in [Nirwana et al. \(2014\)](#) are a financial distribution run by the financial system. The financial system seeks to ensure sound financial judgment and cover-up liquidity. According to [DiNapoli \(2011\)](#), the indicators of financial factors are the debt limits, the tax potential, and the legality of expenditure. According to [DiNapoli \(2011\)](#), institutional factors are management practices and the existence of policies or regulations of local governments that guarantee the implementation of healthy governance. Furthermore, the institutional indicators are the budget and financial variance, the timeliness and accuracy of financial transactions, and the quality and timeliness of financial reporting.

In addition, [DiNapoli \(2011\)](#) stated that the Financial Condition are determined by a combination of government environment, institutional and financial factors. For example, when there is a decrease in the population, so there will be a reduction in the tax revenue (negative environmental factors). However, the government can overcome this by reducing services, increasing the tax rate, and striving to develop economic resources, which ultimately determine the Financial Condition of the local governments.

Financial Condition at a regional level can be influenced by several factors such as CEO power ([Daily and Johnson, 1997](#)), environmental and operational management ([Sueyoshi and Goto, 2010](#)), and technical performance ([Kristensen et al., 2008](#)). These antecedents can be grouped into two types of resource, namely human capital and physical capital. The former was workforce competencies (e.g. knowledge and skills), while the latter is more related to technology, devices, and equipment used to perform tasks in organisations. The human and physical capital will be the most two precious antecedents of an organisation's Financial Condition.

The notion of human and physical capital as critical antecedents of financial Condition has been supported by a theoretical perspective. A resource theory or commonly called Resource-Based Theory (RBT), uses a resource-based approach to analyse competitive advantages ([Barney, 1991, 2001](#)). The theory is used as a supporting theory in this study to see the effect of Human Capital and Physical Capital on regional Financial Condition. The key to the RBT approach is a strategy of understanding the relation between valuable resources, organisation capabilities, competitive

advantage, and profitability. In the end, all those resources should particularly provide supports for maintaining the competitive advantage over time.

The theory was first introduced by [Wernerfelt \(1984\)](#) in his work entitled “*A Resource-based View of the Firm*”. However, most of the researches referred to [Barney's \(1991\)](#) seminal work. The firm resources explained how to help the company in improving the efficiency and effectiveness of operations. Furthermore, the competitive advantage can be understood by instilling an understanding of the company consists of heterogeneous and immovable elements. The steps in maximising the company's competitive advantage should fit into the four criteria: valuable, awareness, inimitability, and non-substitutability.

According to RBT, the resources can be generally defined by including the assets, organisational processes, organisational attributes, information, or knowledge controlled by the organisations that can compile and imply the strategies. Regardless of the number of resources, the RBT categorises the resources into three major types;

- a. Physical Capital (e.g. technology, manufacturing, and equipment)
- b. Human Capital (e.g. training, experience, insight)
- c. Organisational capital resources (e.g. formal structural)

Using the framework of the RBT, both Human and Physical Capital can maintain the quality of Financial Condition in an organisation, including public organisation such as provincial governments. Human Capital would provide the organisation with desired human resources, directly influencing the quality of Financial Condition. Financial Condition needs skilful personnel and experts to secure the accountability of the reporting system, for example. The existence of these expected workforces will sustain the quality of Financial Condition. The same case applies to Physical Capital. An organisation with ready-to-use tools, devices, and equipment will be more likely to exert those tools to support the organisation's achievement and provide support for Financial Condition.

The concept of RBT, in this case, also asserts that Human Capital and Physical Capital are able to create an organisation's competitive advantage to generate incremental values for the organisation. The value referred to the better performance in an organisation, including financial performance. Throughout the application of adequate Human Capital and supportive Physical Capital, provincial offices can provide more sufficient and complete information towards better Financial Conditions ([dan Ghozali and Chariri, 2007](#)). Thus, the first two hypotheses are as follows:

**Hypothesis 1** (H1): Human Capital has a positive effect on the Regional Financial Condition

**Hypothesis 2** (H2): Physical Capital has a positive effect on Regional Financial Condition

The supports from the two resources may not always provide desired effect on Financial Condition due to some conditions. For instance, previous studies have documented that organisational culture ([Yesil and Kaya, 2013](#)) and gender ([Campbell and Mínguez-Vera, 2008](#)) determined financial performance. Certain cultures may hinder the implementation of supportive human and physical capital. Likewise, gender-related injustice also impedes effective Human Capital management. It appears that there is some degree of control that may potentially influence the effect of some resources on an organisation's financial achievement. It is plausible that the level of control presumably moderates the two key resources' effect on Financial Condition.

Human Capital and Physical Capital depend on the degree of control applied by organisational management. Management Control becomes much more critical in ensuring that the human and physical resources are in place to support Financial Condition. [Anthony et al. \(2005\)](#) stated that “Management control is a process by which managers influence other organisational members to imply the organisational strategies”. It is also a process of detecting and correcting errors for accidental or intentional work. Since its focus is on humans and implementing plans, management control requires strong psychological resources. Activities such as communication, advising, encouraging and criticising are essential parts of this process. Management control utilises task control to ensure effective and efficient work by considering three critical areas: budgeting, economic value-added, and balance scorecard ([Otley, 1999](#)).

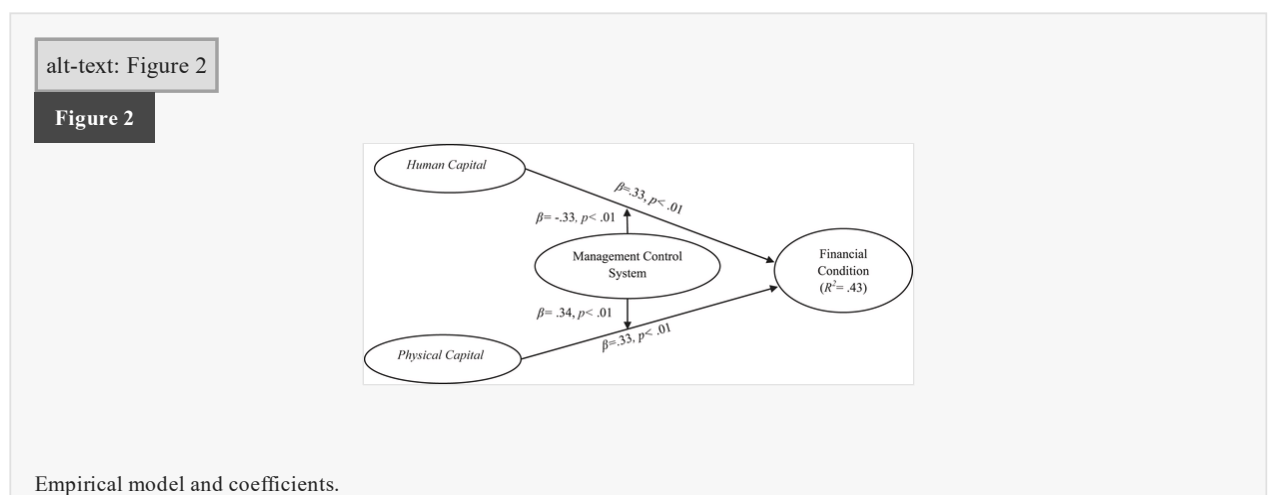
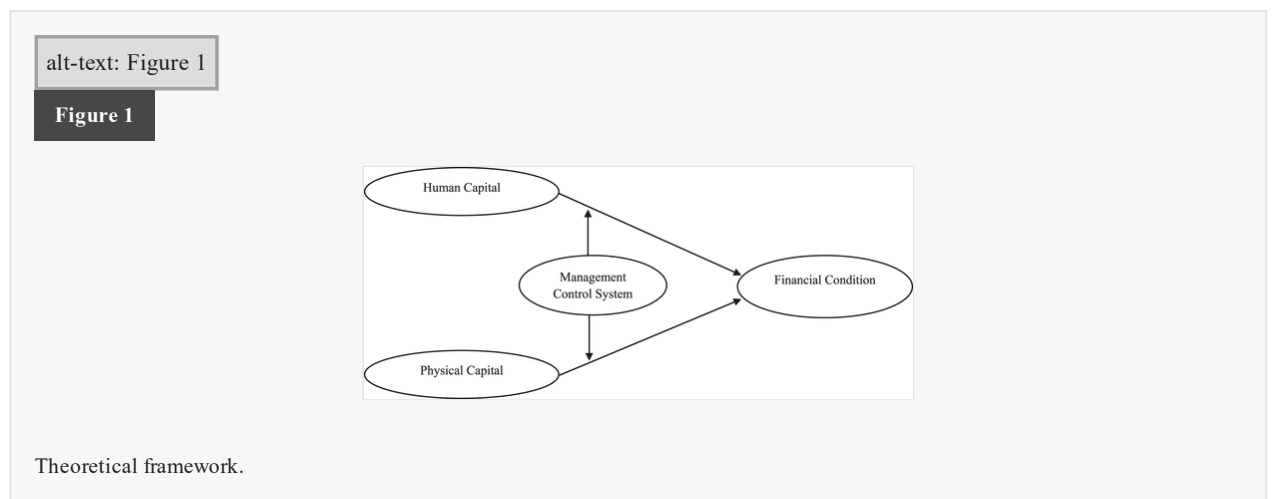
Control Theory of Strategic Human Resource Management ([Snell, 1992](#)) proposed that as an organisation expects a certain level of performance, it must implement a high degree of control over human resource management, particularly

when the goals and incentives are less clear. This theory also suggests that control depends on the degree of standard exhibited by organisations. As goals and incentives are less known and the cause-effect knowledge of management seems a blur, high control is highly needed. Organisations may suffer from underachievement performance or serious issues related to organisational attainment.

The same case also applies to the Financial Condition. Using this Control theory perspective, public sector financial condition at the regional level potentially requires some control in managing Human Capital and Physical Capital. The control should start from input, behavioural, and finally outputs. Human Capital management could support financial Condition when the input (e.g. recruitment and selection) is practised with systematic control. Behavioural control is related to personnel's behaviours which also require control to direct personnel towards targeted goals. Output control means organisation, stakeholders, and employees should have a crystalised standard of the desired output, and this standard is deemed to guide human capital management. Thus, the higher control implemented by the organisations, the more positive the effect of Human Capital on Financial Condition.

Physical capital also demands specific control in order to bring a positive impact on Financial Condition. As proposed by the Control theory (Snell, 1992), a clear and crystalised standard is vital in developing control. Thus, a certain degree of control is essential to ensure that the physical resources are utilised to attain organisational goals. According to the theory, input, behavioural, and output control are three control systems elements. Physical Capital should also be controlled using this concept. Organisations with a high degree of physical resource control would carefully consider physical input, control personnel behavior in using physical assets or resources and evaluate physical utility output with caution. By implementing this system, the positive effect of Physical Capital on Financial Condition will be considerably improved.

Latham and Locke (1979) also have strengthened the argument that a high degree of control may cause the financial resources (i.e. human and physical capital) are even impactful. The goal-setting theory (Latham and Locke, 1979; Locke et al., 1981; Tosi et al., 1991) postulates that clear and specific goals are proven to be more effective than “do your best” goals. The goals impact organisation as the degree of clarity is high, which also applies to Financial Condition. An organisation could perform a better Financial Condition as the control over Human and Physical Capital are more standardised and crystalised. Similarly, Snell (1992) found that clear standard played an essential role in developing a better control system (see Figures 1 and 2).



Given the vital role of control, this study proposes a management control system to control how the strategy in the company runs according to plans and objectives. According to [Purnamasari \(2009\)](#), to encourage companies to compete in increasingly fierce global competitions, professional managers must perform Management Control System. It is a process and structure systematically arranged by management in controlling activities so that the company's goals and objectives can be achieved. Therefore, Management Control System will moderate the effect of Human Capital and Physical Capital on Financial Condition. The last two hypotheses will be:

**Hypothesis 3 (H3):** Management Control System moderates the relationship between Human Capital and Financial Condition

**Hypothesis 4 (H4):** Management Control System moderates the relationship between Physical Capital and Financial Condition

### 3 Method

#### 3.1 Participants


Participants were employees of the Regional Financial and Asset Management Agency who served as the member of the Financial Report Compilation team in the Golden Triangle area of South Sulawesi. According to the human resource department, more than 100 employees worked in this team, and their jobs were related to financial evaluation and audit. Researchers had limited access to some information due to confidentiality reasons. The study was advertised to the three organisations, and participation was voluntary. The South Sulawesi Golden Triangle region was formed from a path connecting the capital city and two big cities in South Sulawesi (Makassar, Gowa and Maros). Some participants worked as Secretary, Budgetary, Treasury, Accounting and Information Technology and Regional Assets. This study recruited five people in each division to obtain a sufficient sample, resulting in 25 participants in each region. Since there were three regions, this study received responses from 75 participants in total. By implementing the *G\*Power* analysis, the number of participants ( $n = 75$ ) had enough power to eliminate the type II error (Faul et al., 2007([2020](#))). The number of female participants was 53%, and male 47%, with most participants, had bachelor degrees (81%) and some post-graduate degrees (19%).

#### 3.2 Measures

This study employed measures which the researchers developed following the theory of each variable (Brislin, 1970 ([2021](#)); Hinkin et al., 1997([2019](#))). There are four measuring instruments in this study. The following [Table 1](#) describes the construction of the measure:

alt-text: Table 1

Table 1

 The table layout displayed in this section is not how it will appear in the final version. The representation below is solely purposed for providing corrections to the table. To preview the actual presentation of the table, please view the Proof.

Operational variable.

Variable	Dimension	Indicator
<i>Human Capital</i> ( <a href="#">Mignone and dan O'Neil, 2005</a> )		1. Special Competence
		2. Work Experience
		3. Skill
<i>Physical Capital</i> ( <a href="#">Baldi, 2013</a> )		1. Availability of Natural Resources and the Environment
		2. Government Investment
		3. Facilities and Infrastructure (e.g., Computer and Internet Networks)
Management Control System ( <a href="#">Prabawati, 2010</a> ( <a href="#">2022</a> ))		1. Strategic Planning

		2. Implementation and Measurement
		3. Evaluation
Financial Condition (DiNapoli, 2011)	Environment	1. Community needs
		2. Population
		3. Property Value
		4. Inflation
		5. Individual income
		6. Budgeting
	Organisation	1. Budget Cost
		2. Timeliness and accuracy of financial transactions
		3. Quality and timeliness of financial reporting
	Financial	1. Limitation of Debt
		2. Potential Taxes
		3. Legality of Expenditures

All the measures were developed in Bahasa Indonesia using a 5-point Likert-type scale (1 = Strongly Disagree to 5 = Strongly Agree). Human Capital Scale, Physical Capital Scale, and Management Control System Scale consisted of three items, while the Financial Condition Scale had 12 items. The items included “the organisation has many employees with special competence to accomplish challenging tasks” and “the organisation has implemented a well-designed evaluation system.” The measurement model, including construct validity and reliability, was examined to provide adequate support for the measurement model.

To test the measurement model, this study performed a Confirmatory Factor Analysis (CFA) with four measures (i.e., Human Capital, Physical Capital, Management Control System, and Financial Condition). The hypothesised model was tested against other alternative models. The fit indices confirmed that the hypothesized model showed a better fit (cmin/df = 1.2,  $p > 0.05$  [Instruction: I rounded all the number/values to two digits after point and removed zero before point ], RMSEA = .05, and SRMR = .04) than the two-predictor model where Human and Physical Capital were combined (cmin/df = 2,  $p > 0.05$ , RMSEA = .08, and SRMR = .08) and the single-predictor model where all predictors and Management Control System were combined in the model (cmin/df = 4,  $p > 0.05$ , RMSEA = .09, and SRMR = .09810). These results suggested that the data had four independent constructs confirming the proposed theoretical model. Outer loading value indicated that the convergent validity of the data had coefficients above 0.50 for each item and the  $t$ -value for each item above 1.96. Also, the Average Variance Extracted (AVE) value in each construct variable was greater than 0.50. Based on the results, all constructs in the proposed theoretical model fit into the convergent validity criteria. Those can be seen in the following Table 2:

alt-text: Table 2

Table 2

*i* The table layout displayed in this section is not how it will appear in the final version. The representation below is solely purposed for providing corrections to the table. To preview the actual presentation of the table, please view the Proof.

Average variance extracted (AVE).


Variable	AVE
Human Capital	0.6217
Physical Capital	0.600
Management Control System	0.534

Source: Primary data.

The reliability test aims to examine the composite reliability of each measurement construct. The results suggested that the constructs had composite reliability coefficients above 0.70 (see Table 3), confirming all the constructs had acceptable reliability.

alt-text: Table 3

Table 3

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Composite reliability.

Variable	Composite Reliability
Human Capital	0.83 <del>26</del>
Physical Capital	0.82 <del>18</del>
Management Control System	0.93 <del>+</del>
Financial Condition	0.98 <del>76</del>

Source: Primary data.

### 3.3 Procedure

This research was part of a larger research program conducted by the regional financial institution. Data collection was conducted using a three-wave data collection technique to avoid common method biases (MacKenzie and Podsakoff, 2012(2024)). The survey booklets were delivered to the Human Resource Department (HRD) Office, and the HRD personnel sent the booklets to the potential participants. In the first phase, researchers collected demographic, human capital and physical capital data. After a week, researchers collected data for the Management Control System and the following week the Financial Condition data. Participants were asked to complete the questionnaire from the beginning to the end of the data collection, which lasted for one month. All participants ( $n = 75$ , 100%) fully participated in the study from the beginning to the end of the data collection. Informed consent was obtained from each participant in the beginning of the data collection. This study followed and obeyed the ethical standards of the institutional and national research committee of Indonesia. Study protocol number UH.EB.005.01.03.20 was reviewed and approved by the Research Ethics Committee at Universitas Hasanuddin in Indonesia.

## 4 Results and discussion

### 4.1 Results

This study conducted several stages in the data analysis. First, the data were analysed using descriptive statistics and the bivariate correlation technique. Secondly, the relationship between variables was tested using Pearson Product-moment Correlation. Lastly, the Hierarchical Moderated Regressions test (Anderson, 1986(2023)) was conducted to answer hypotheses.

Table 4 ~~above~~ showed the means and standard deviations for each variable in the study. In addition, the relationship between variables was presented. Generally, all variables in the study were positively and significantly correlated. The level of relation between these variables ranged from  $r = .34$  ( $p < .01$ ) to  $r = .86$  ( $p < .01$ ). The Human Capital had a strong correlation with the Financial Condition ( $r = .50$ ,  $p < .01$ ), and so did the Physical Capital ( $r = .53$ ,  $p < .01$ ). The relation between the Management Control System and the Financial Condition was even stronger with the correlation coefficient of  $r = .76$  ( $p < .01$ ). The results indicated that the two independent variables (i.e. Human Capital

and Physical Capital) and Management Control System had a strong positive relationship with Financial Condition. (see Table 5).

alt-text: Table 4

Table 4

*i* The table layout displayed in this section is not how it will appear in the final version. The representation below is solely purposed for providing corrections to the table. To preview the actual presentation of the table, please view the Proof.

Descriptive statistics and bivariate correlations.

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
Human Capital	11.43	1.21	-					
Physical Capital	11.79	1.23	.52**	-				
MCS	12.12	1.15	.45**	.54**	-			
FC(Environment)	22.90	2.52	.53**	.56**	.73**	-		
FC(Institution)	12.17	1.22	.30**	.34**	.62**	.78**	-	
FC(Financial)	12.26	1.35	.46**	.46**	.67**	.72**	.64**	-
FC Total	47.33	4.63	.50**	.53**	.76**	.86**	.87**	.85**

Note: *N* = 75, *M* = Mean, *SD* = Standard Deviation, MCS = Management Control System, FC = Financial Condition, \*\**p* < .01.

alt-text: Table 5

Table 5

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Moderated regressions with financial condition as dependent variable.

Model		<i>R</i> <sup>2</sup>	<i>Adj. R</i> <sup>2</sup>	$\Delta R^2$	$\Delta F$	$\beta$
1	Human Capital	.25***	.24	-	24.81	.50***
2	Human Capital	.35**	.33	.10**	10.86	.31**
	Physical Capital					.37**
3	Human Capital	.36**	.34	.01	1.47	.32**
	Physical Capital					.37**
	HC*MCS					-.12
4	Human Capital	.43**	.40	.06**	7.98	.33**
	Physical Capital					.33**
	HC*MCS					-.33**
	PC*MCS					.34**

Note: *N* = 75,  $\Delta$  = change,  $\beta$  = Standardized Beta Weight, HC = Human Capital, PC = Physical Capital, \*\*\**p* < .001, \*\**p* < .01.

After performing the descriptive statistics and bivariate correlation, the Hierarchical Moderated Regressions analysis was performed. In this study, the regression technique was considered appropriate to examine the contribution of each predictor in different regression models (de Jong, 1999(2025)). The following were the results of the analysis:

This analysis technique allowed researchers to capture the incremental contribution of each predictor in the models. Before running the analysis, all predictors and the moderating variable were mean-centred to eliminate the risk of multicollinearity (Hayes, 2013(2026)). With Human Capital as the only predictor, the first model showed a significant impact on the Financial Condition ( $Adj. R^2 = .25, p < .001$ ). In the second model, Physical Capital was entered, and it contributed a positive and significant added value to the Financial Condition ( $\Delta R^2 = .10, p < .01$ ). In model 3, the interaction between Human Capital and Management Control System did not significantly increase the variance of the Financial Condition ( $\Delta R^2 = .01, p > .05$ ). Model 4 was the regression model that gave the highest contribution to the variance of the Financial Condition ( $\Delta R^2 = .06, p < .01$ ). In model 4, all predictors and the two interactions significantly predicted Financial Condition. However, the interaction between Human Capital and Management Control System contributed a negative effect on Financial Condition (please see Table 5).

The analysis showed that the impact of Human Capital on Financial Condition was positive and significant across all regression models. When there were no other variables in the model, the impact of Human Capital on Financial Condition tended to be strong ( $Adj. R^2 = .24, \beta = .50, p < .001$ ). The impact of Human Capital on Financial Condition remained positive and significant across all the regression models, including in model 4 ( $Adj. R^2 = .40, \beta = .33, p < .001$ ). Based on these results, Human Capital had a positive effect on the Financial Condition, which provided support for H1. The presence of Physical Capital to predict Financial Condition also had a positive impact on all regression models. In model 4, Physical Capital had the same effect as Human Capital ( $Adj. R^2 = .40, \beta = .33, p < .001$ ). The results also provided support for H2.

In model 4, the interaction between Human Capital and Management Control System contributed negatively to Financial Condition ( $\beta = -.33, p < .01$ ). The impact of Human Capital on Financial Condition depended on the level of the Management Control System. The higher the Management Control System, the lower the impact of Human Capital on Financial Condition, and vice versa. This finding supported H3 that stated the Management Control System moderated the relationship between Human Capital and Financial Condition. However, one should note that Management Control System could weaken the effect of Human Capital on Financial Condition.

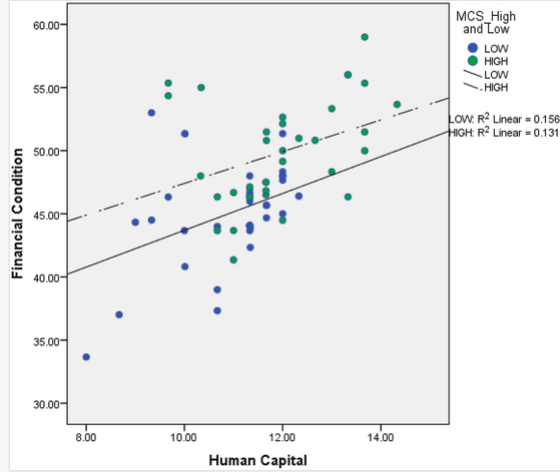
The interaction between Physical Capital and Management Control System also significantly impacted the Financial Condition ( $\beta = .34, p < .001$ ). The impact of this interaction was positive, indicating that the effect of Physical Capital on the Financial Condition would increase when the Management Control System was high. Conversely, if a low Management Control System could reduce the impact of Physical Capital on the Financial Condition, these results provided support for H4.

The last regression model (model 4) showed  $R^2 = .43 (p < .01)$ , or the model explained 43% of the variance in the Financial Condition. This finding considerably explained a large portion of Financial Condition in the organisations.

Figure 3 below illustrates the interaction between Human Capital and Management Control Systems in predicting Financial Condition. The graph explained that the value of the prediction model was higher when the Management Control System was at a low level ( $R^2 = .16$ ), compared to when it was at a high level ( $R^2 = .13$ ). The existence of a high Management Control System could reduce the impact of Human Capital on Financial Condition.

alt-text: Figure 3

Figure 3

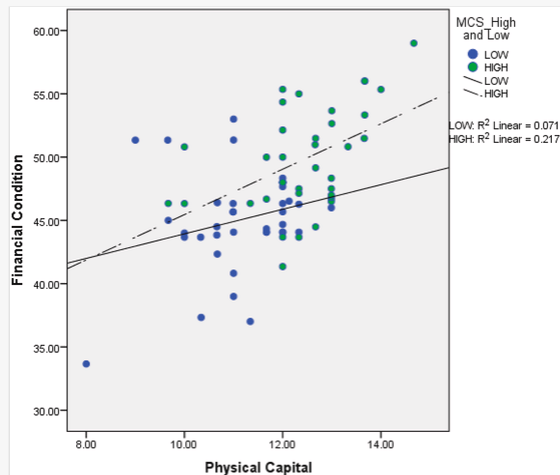


Interaction between human capital and management control system.

The interaction between Physical Capital and Management Control System can be seen in Figure 4. Unlike the previous interaction model, the interaction in Figure 4 showed that the impact of Physical Capital on Financial Condition was stronger when the Management Control System was also at a high level ( $R^2 = .22$ ) compared to low levels ( $R^2 = .07$ ). A high Management Control System could support the positive impact of Physical Capital on Financial Condition.

alt-text: Figure 4

Figure 4



Interaction between physical capital and management control system.

## 5 Discussion

### 5.1 The effect of human capital on financial condition

The analysis showed that Human Capital had a positive influence on Financial Condition. Based on the analysis, the higher Human Capital (e.g., competencies, work experience and skills), the more likely Financial Condition leverages in the golden triangle areas. This suggests that Human Capital affects environmental, institutional, and Financial Conditions. In this study, a successful Financial Condition referred to the environment, institution and financial dimensions.

Firstly, within the environmental dimension, there were community needs, populations, property values, inflation, individual income, and budgeting, all of which were necessary to establish a stable Financial Condition. Secondly, human resources also contribute to institutional financial performance. Human Capital aspects support the organisation strategy, including the availability of budget, timeliness and accuracy of financial transactions, quality, and timeliness of financial reporting. Lastly, the workforce competence also supports the financial dimension, including debt limits, tax potential and legality of expenditure. Successful financial dimension, in this regard, relied upon the workforce competence. Human capital serves as a means to monitor debt limits and tax management, for example. The increase (or decrease) in Human Capital will influence the regional Financial Condition. This notion has been previously supported by Zulkifli [et al.](#) (2018), [Ramli et al.](#) (2014), [Nimtrakoon](#) (2015), [Ervina et al.](#) (2008), [Is et al.](#) (2014).

The RBT ([Barney, 1991, 2001](#)) has explained the importance of valuable and rare resources in fostering organisation competitive advantages. Human Capital also acted as a valuable resource for organisational success, including financial achievement within the organisation. As the organisation maintains sufficient quality of Human Capital, the workforce will strive to facilitate sustainable financial performance. Thus, according to this study, the RBT successfully explained the role of Human Capital in predicting Financial Condition.

Special competence, work experience, and skills became important points in improving Financial Condition because those could be an essential part of improving the organisation's innovation, strategies, and objectives. In this study, participants perceived that the development of Human Capital increased the regional government's ability to improve the economy and maximise its potential. This research postulated that the role of Human Capital in a regional government needed to be reconsidered because Human Capital can strengthen the goal attainment of a regional government.

## **5.2 The effect of physical capital on financial condition**

The results showed that Physical Capital had a positive effect on Financial Condition. The level of Physical Capital in terms of the availability of natural resources and the environment, government investment, facilities and infrastructure (e.g. computers, internet access) had a significant impact on Financial Condition in the three regional areas. Physical Capital contributed positively to Financial Condition, including fostering environmental, institutional, and financial aspects.

As mentioned earlier, there are three distinct dimensions of Financial Condition, namely the environment, institutions and finances. These three dimensions depict the local government's financial performance in South Sulawesi (i.e. Makassar, Gowa and Maros). In improving Financial Condition, the regional governments should take into account the community needs, populations, property values, inflation, individual income and budgeting. The second dimension was the institution, which covers budget availability, timeliness and accuracy of financial transactions, and the quality and timeliness of financial reporting. The third dimension was finance which covered debt limits, tax potential and legality of expenditure.

The RBT has supported that Physical Capital (e.g. technology) has provided valuable resources for the governmental organisations in South Sulawesi, Indonesia. This empirical study has supported the theory and previous findings. Physical Capital had a significant positive influence on the regional government's Financial Condition in these three regions. [Barney \(2001\)](#) proposed that the competitive advantages of an organisation can be achieved by utilising the existing valuable and rare resources in the organisation. Consistently, in the case of local government organisations in Indonesia, it appeared that Physical Capital added a significant amount of incremental variances to the development of Financial Condition. Physical assets, technologies, devices and other facilities were viewed as the essential elements of a successful Financial Condition.

This study was also in line with research conducted by Zulkifli [et al.](#) (2018), [Nimtrakoon](#) (2015), [Ervina et al.](#) (2008), [Is et al.](#) (2014). However, the effect could be indirect as other variables might influence the relationship. For example, [Nirwana et al.](#) (2014) discovered that Cultural Capital moderated the Physical Capital - Financial Condition relationship. Therefore, this study also considered testing the moderating effect of the Management Control System in the relationship.

Limitations of Physical Capital often became a problem of a local government regardless of the quality of Human Capital. Generally, regions with outstanding Human Capital would be more developed if juxtaposed with the

availability of natural resources and the environment, adequate government investment, facilities and infrastructure. In this study, participants considered that Physical Capital, in the form of technologies, facilities, and infrastructures, provided significant support for the region's Financial Condition.

### **5.3 The moderation effect of management control system on the relation of human capital and financial condition**

Apart from the direct effect of Human Capital on Financial Condition, this study also found that Management Control System moderated the effect of Human Capital on Financial Condition. This research was supported by the Control Theory (Snell, 1992) as the theory stated that managing human resources must be supported with input, behavioural, and output control. In addition, the Control Theory and the Goal Setting (Latham and Locke, 1979) postulated that clear and crystallised standard potentially emphasise the effect of resources. Besides, the goal-setting principles have stressed enough the importance of specific and clear goals. These theories have supported the notion that organisations with supportive human resources, but unspecified goals and rules would experience constraints to rise their Financial Condition.

This study discovered interesting findings related to the moderation effect of the Management Control System. The presence of a lower degree of Management Control System could trigger improvement in local government organisation. In contrast, a high degree of Management Control System would reduce the effect of Human Capital on Financial Condition. The theories have supported that Management Control System facilitated the Human Capital – Financial Condition relationship. The moderating effect seems to be more positive as the theories suggested that a clear and specific goal in human resource management could improve Financial Condition. However, this study showed opposing evidence as the moderating effect was found to be negative. This indicated that the existence of a Management Control System could weaken the role of Human Capital on Financial Condition.

In the local government areas, Human Capital significantly determined the fluctuation of Financial Condition. However, as the Management Control System implemented with a considerably high degree of input, behavioural, and output control, Human Capital would be less influential. The Management Control System improves Human Capital management by standardising control over the input quality, specifying work behaviour, and directing control to attain desired output. The government officials could have perceived Human Capital as an insignificant resource as the human resources management was highly controlled. The regional governments could have discarded the importance of Human Capital for Financial Condition as they perceived a high Management Control System.

The results of this study were in line with the research conducted by Chandra (2017), Ong et al. (2016), Utary (2014), where they all found that the Management Control System had a significant influence on Human Capital and Financial Condition. However, scholars and government officials should consider how the Human Capital and Management Control System interact to predict Financial Condition. As the Management Control System increases, the Human Capital impact on Financial Condition declines. Thus, organisations with a flawed Management Control System may require high quality of Human Capital to improve financial conditions.

### **5.4 The moderation effect of management control system on the relation of physical capital and financial condition**

This study also indicated that the Management Control System moderated the effect of Physical Capital on Financial Condition. The relation between Physical Capital and Financial Condition increased as the Management Control System was included in the prediction model. As predicted previously using the Control Theory by Snell (1992), a high degree of control over input, behaviour, and output improved the quality of Physical Capital. In this respect, Physical Capital could be more influential as the Management Control System ensured its quality by controlling input of physical resources, controlling behaviours in utilising the resources, and directing the outputs of resources. This study suggested that as the Management Control System increases, it improves the effect of Physical Capital on Financial Condition.

Unlike the former moderating effect, Management Control System and Physical Capital went hand-in-hand in predicting Financial Condition. It indicated that the effect of Physical Capital on Financial Condition depended on the degree of the control system within the organisation. Organisations with abundant Physical Capital may not always lead to high performing Financial Condition unless they implement a favourable Management Control System. This

sheds light on the importance of the Management Control System in facilitating the role of Physical Capital. Hypothetically, if the organisations aim to have fewer physical resources, managing the resources using the Management Control System principles will accentuate the effect of the resources on the organisations' Financial Condition.

The results were in line with some previous investigations conducted by [Chandra \(2017\)](#), [Ong et al. \(2016\)](#), and [Utary \(2014\)](#). In those studies, Management Control System was one of the predictors of Financial Performance in organisations. The Management Control System's effect is vital as it serves as control over resources availability and quality. [Anthony et al. \(2005\)](#) stated that Management Control System was also a process for detecting and correcting errors at work.

In the regional government offices, the three golden areas of South Sulawesi may have relied on the Management Control System to attain an expected level of Financial Condition. In this regard, the regional government should strive to optimise control over the physical resources. The control system should manage the selection of equipment, human behaviours related to the application of the equipment and monitor the effectiveness of specific technologies or devices on outputs. Physical Capital positively predicts the regional government Financial Condition as far as the physical resources controlled with systematic procedure starting from input to output.

## **5.5 Implications**

This research empirically examined the influence of moderating effect of Management Control Systems on the two antecedents of the regional Financial Condition; Human Capital and Physical Capital. The results supported that the perceived Management Control System significantly determined Human Capital and Physical Capital's effect on Financial Condition. However, this moderator behaved differently towards Human and Physical Capital in the regional government organisations. Management Control System tended to alter the low quality of Human Capital while at the same time strengthen the Physical Capital – Financial Condition Relationship.

If the regional governments implement a high Management Control System, the Physical Capital will be more likely to foster Financial Condition. Unfortunately, this condition will also reduce the Human Capital's effect on Financial Condition. Albeit the organisations have exhibited sufficient workforce competence, it will have less impact on the Financial Condition as the Control System is highly managed. Presumably, outstanding Human Capital can tolerate a flawed Management Control System and still positively impacts Financial Condition. Control System is vital for directing the effect of resources on Financial Condition. However, in this case, the local government officials should be aware that increasing control over Human Capital can reduce the effect of human resources on Financial Condition. Human Capital in the local government areas may not impact financial performance as the organisations implement high control system.

## **5.6 Limitations and future research directions**

This study employed a set of questionnaire as valid and reliable measures of variables being studied. The initial attempt was to collect objective data. However, the existing objective data were not adequately standardised across different organisations. Accessing the data and information related to the objective financial record was also strictly prohibited. Likewise, researchers cannot find alternative objective data that measured the level of achievement of the whole existing variables, other than the perception of employees who work in the organisations. This study then used Subject Matter Experts (SMEs) perception of each variable, and this procedure had been permitted by the research ethics committees and the government officials. Therefore, future studies can repeat this method using objective data sources from government officials by establishing mutual collaborations.

Furthermore, although this research succeeded in involving representatives from all agencies with varying positions, the number of participants involved was still small compared to previous studies. By increasing the number of participants and involving more governmental organisations, future studies would provide more information regarding the effect of the control system in the regional government organisations.

## **6 Conclusions**

This study has two folds. Firstly, it contributed new information about the effect of two key resources (i.e. Human and Physical Capital) on financial performance in governmental organisations. Secondly, this study broadens our

understanding of the unique role of the Management Control System in the local government organisations in South Sulawesi, Indonesia. The first part of the findings was consistent with the RBT as both Human and Physical Capital significantly predicted Financial Condition. However, the second part of the findings was mixed as Management Control System negatively moderated the effect of Human Capital while at the same time also positively moderated the effect of Physical Capital on Financial Condition. This study highlighted the importance of improving the standard of the control system in managing the local government organisations. Although it potentially reduces Human Capital's effect, a high degree of control will help organisations maintain and improve desirable Financial Condition.

## Declarations

### Author contribution statement

Asri Usman: Conceived and designed the experiments; Performed the experiments.

Hillman Wirawan: Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

Zulkifli: Performed the experiments.

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### Data availability statement

The data that has been used is confidential.

### Declaration of interests statement

The authors declare no conflict of interest.

### Additional information


**Q6** No additional information is available for this paper.

## Uncited reference

~~Abdillah and Hartono, 2015; Baron and Kenny, 1986; Ghozali, 2006; Locke and dan Lathan, 2002; Ritonga, 2014~~

**Q9** ~~Standards for Internal Control in Federal Government, 1999; Undang-undang,;~~

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## eToc Blurb

Human capital, Physical capital, Management control system, Financial condition, Indonesia

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## Queries and Answers

Q1

**Query:** Ref(s). Kristanti et al., 2016; Elshaday et al., 2018; Garcia-Sanchez et al., 2012; Cuadrado-Ballesteros and Bisogno, 2019; Zafra-Gómez et al., 2009, 2010; Lepak and Snell, 2002; Zulkifli et al. (2018); Zulkifli (2018); Hinkin et al., 1997; Faul et al., 2007; Brislin, 1970; Prabawati, 2010; Anderson, 1986; MacKenzie and Podsakoff, 2012; de Jong, 1999; Hayes, 2013; Is et al. (2014) are cited in the text but not provided in the reference list. Please provide them in the reference list or delete these citations from the text.

**Answer:** all references have been inserted for the above citations

Q2

**Query:** The citation ‘Anthony and Govindarajan (2005); Ghozali and Chariri, 2007; Mignonedan O’Neil, 2005; Sari and Fitriani (2009); Nirvana et al. (2014); Rachma (2014); Purnomo, and Budiawan, 2014; Barney, 1991; Dinapoli, 2011’ has been changed to match the name in the reference list. Please check here and in subsequent occurrences, and correct if necessary.

**Answer:** Thanks, they are all correct

Q3

**Query:** The citation ‘Masyur (2016); Halim et al., 2012’ has been changed to match the date in the reference list. Please check here and in subsequent occurrences, and correct if necessary.

**Answer:** thanks, they are all correct

Q4

**Query:** Figures 1, 2 and table 5 were not sequentially cited in the text, and have been renumbered both in the text and in the artwork. Please check, and correct if necessary.

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Q5

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**Answer:** Thanks, table 2 citation is correct

Q6

**Query:** Correctly acknowledging the primary funders and grant IDs of your research is important to ensure compliance with funder policies. We could not find any acknowledgement of funding sources in your text. Is this correct?

**Answer:** Yes

Q7

**Query:** Please check retained author group for the Ref(s). Abdillah and Hartono, 2015; dan Ghozali and Chariri, 2007; Budiawan and Purnomo, 2014 and correct if necessary.

**Answer:** yes, they are all correct

Q8

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**Answer:** please delete this ref

Q9

**Query:** Uncited references: This section comprises references that occur in the reference list but not in the body of the text. Please position each reference in the text or, alternatively, delete it. Any reference not dealt with will be retained in this section. Thank you.

**Answer:** Please delete all uncited reference

Q10

**Query:** Please confirm that given names and surnames have been identified correctly and are presented in the desired order and please carefully verify the spelling of all authors' names.

**Answer:** Yes

## INFORMED CONSENT

Title of Research: Human Capital and Physical Capital in Regional Financial Condition

Principle Investigator, Affiliation and Contact Information: **Asri Usman**  
Fakultas Ekonomi dan Bisnis  
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Fakultas Ekonomi dan Bisnis  
Universitas Hasanuddin  
Jl. Perintis Kemerdekaan Km. 10  
Kampus UNHAS Tamalanrea  
Makassar, Indonesia

1. Introduction and Purpose of the Study

*This study aims to investigate employees' perception about their daily work routine which includes their idea about their performance and experience in the workplace.*

2. Description of the Research

*In this study you will be asked to complete questionnaires. The questionnaire will come in three times in every two weeks. Each questionnaire will take up to 15 minutes to complete.*

3. Participation

*We estimate there will be 100 employees participate in this study. They will come from the Regional Financial and Asset Management Agency team in the Golden Triangle area of South Sulawesi. As a participant, you will receive a survey booklet three times every two weeks. Your decision to participate in this study is complete voluntary. If you decide to not participate in this study, it will not affect the care, services, or benefits to which you are entitled.*

4. Potential Risks and Discomforts

*You may experience some discomforts in filling the questionnaire. If you do not feel comfortable enough to answer the questions, you can stop at any point. You can withdraw from the study at any point and your decision will not affect your job, the care, service, or benefits to which you are entitled. This study and your participation will not impact your job or your performance report.*

5. Potential Benefits

*People who participate in this study may better understand the link between human resources and financial condition.*

6. Confidentiality

*The data are completely anonymous. Your responses will only be reported in a group and no personal identification will allow other parties to identify your identity. We do not collect any information that can easily identify your personal identity. The data will only be accessed by the principal researcher and will be kept in a passport-protected computer.*

7. Compensation

*Participants will not be compensated for participation in this study*

After reading the above information, I voluntarily agree to participate in this research program

Yes

No

I understand that I will be given a copy of this signed Consent Form.

Name of Participant: \_\_\_\_\_

Signature:

Date:

Note: A copy of the signed, dated consent form must be kept by the Principle Investigator and a copy must be given to the participant.



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Dear editor and reviewer,

As suggested, we included our ethic approval letter and the informed consent form in the revised version of the manuscript. Please let us know if anything we should do to expedite the publication process.

Sincerely,  
Asri Usman

Dear Editor and Reviewers,

I hope this finds you well,

We are pleased to receive the decision regarding our manuscript that has been submitted to Heliyon. The manuscript has been revised, and new information has been added to improve clarity. Here we provide our responses to each comment from the reviewers:

For the first reviewer:

We valued your input and seriously considered your comments in our discussion. Here are responses to your comments:

1. For the method, it was difficult for us to find exactly the number of participants. We could only mention that the number was greater than 100 because of some conflicts of interest we were trying to avoid. Some of these employees closely work with auditors and inspectors of the regional government offices. We have tested our data using the G\*Power calculator, and the results showed enough power to reduce type II error.
2. As suggested, all coefficients have been rounded two digits after zero.
3. For the measure section, we have included model fit indices (i.e., chi-square, df, p-value, RMSEA), also compared the measurement model with other alternative models to reduce biases. The measures were self-report measures by subject matter experts (SME), and some items have been included in the measure section.
4. The reason we employed Hierarchical Moderated Regression because we wanted to compare different regression models. We were able to compare the change in  $R^2$  by using this method. We understood that Structural Equation Model could be used in this study, but it could only give us one model. At the same time, we intended to show our readers how different antecedent (e.g., human capital) could change variance in Financial Condition.
5. Our analysis also included a “mean-centred” procedure to eliminate multicollinearity. We have reported this in the revised manuscript.
6. As suggested, we have added some arguments related to the importance of Human Capital and Physical Capital. We also included some studies that previously predicted Financial Condition.
7. Previous scholars in this area have overlooked Management Control System. We aimed to tailor the role of management, human factors, and physical aspects of financial performance in an organisation. We have specified the reasons to include Management Control System as the moderating variable in this study.
8. As suggested, we reorganised the literature and hypotheses

For reviewer #2

1. We agreed that many factors within the organisation could predict financial performance. We have cited some studies that have revealed the predictors of financial performance. Human Capital and Physical Capital are two critical resources in the organisation but have received less attention from scholars in accounting or financial management studies.
2. For the method, the participants were recruited via advertisements. We did not directly communicate with potential participants to avoid the potential risk of conflicts. Many of them work as auditors and inspector for authority figures. We reached the HRD offices to communicate our study, and they helped us advertise the study and distribute the survey

booklets. The number of participants should not be an issue according to the G\*Power calculator. We also performed a “mean-centred” technique to eliminate multicollinearity. For the analysis, we initially performed CFA to evaluate our measurement model (i.e., construct validity and reliability), but we did not report the results in the original draft. We have revised the manuscript, included the CFA results, and compared our proposed theoretical model with other alternative models.

3. We preferred to report our current analysis and included measurement model analysis to support our theoretical model.
4. Thank you for your advice regarding the readability of our manuscript. We have revised and sent the manuscript for proofreading. Please do let us know if anything we could do to improve the quality of this manuscript.

Dear Editor and Reviewers,

I hope this finds you well,

We are pleased to receive the decision regarding our manuscript that has been submitted to Heliyon. We have removed the track-changes and added some information regarding research ethich (i.e., inform consent and research ethic committee). Please let us know if anything we should do to expedite the publication process.

Regards,  
Asri Usman

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# THE EFFECT OF HUMAN CAPITAL AND PHYSICAL CAPITAL ON REGIONAL FINANCIAL CONDITION: THE MODERATING EFFECT OF MANAGEMENT CONTROL SYSTEM

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## Abstract

This study examines the effect of Human Capital and Physical Capital on Regional Financial Condition with a Management Control System as moderator. Participants were employees of the Regional Financial and Asset Management Directorates located in three major cities in the province of South Sulawesi, Indonesia. The participants were recruited from three different regions resulting in 75 participants in a three-wave data collection procedure. Four measures were developed (i.e. Human Capital, Physical Capital, Management Control System, and Financial Condition), which were constructively valid and reliable for research purposes. The results showed that Human Capital and Physical Capital directly influenced the Financial Condition. The effect of Human and Physical Capital was moderated by the Management Control System. Management Control System negatively moderated the effect of Human Capital while at the same time also positively moderated the effect of Physical Capital on Financial Condition. This study collected participant's perceptions towards the study variables without any further investigation to the objective measures. Although some scholars may find this as the lack of evidence against the actual Financial Condition, acknowledging experts' perceptions should provide a better understanding of the experienced Financial Condition. Various studies have investigated some factors which may affect Financial Condition. However, this study proposed an examination of the role of the Management Control System. In this case, a capital that is owned by the financial organisations cannot provide a direct impact on the Financial Condition without the role of the Management Control System.

**Keywords:** Human Capital, Physical Capital, Management Control System, Financial Condition, and Indonesia

## INTRODUCTION

Financial Condition is determined by the ability of an area to fulfil an obligation for prospering or serving a community. In this regard, there are three core dimensions to evaluate the Financial Condition they are environmental, institutional and financial dimensions (Dinapoli, 2011). These three dimensions will be interconnected to produce a proper Financial Condition. By

fulfilling all these dimensions, the government will be able to bring more stable Financial Condition.

Firstly, the environmental dimension is the assessment of Financial Condition based on how a government supports or impedes regulations, especially on bringing innovations to the community. Secondly, the institutional dimension is a management practice and legislative policy which guides financial decision making. Its function is often as a response to environmental or political factors (Dinapoli, 2011). Lastly, the financial dimension is most related to financial performance. This particular dimension includes potential tax or incomes in a particular region and a debt limit and legality of expenditure from a region. For some countries, it also consists of fiscal decentralisation management in which each region will obtain a budget for the funds to be managed.

One of the most important questions to this issue is that what are variables may potentially predict Financial Condition. Research in this area has investigated some determinants of Financial Condition and performance. In Indonesia, the type of firm, independent board, gender diversity, and location of director can determine financial distress (Kristanti *et al.*, 2016). On the other hand, a study also revealed that the Capital Adequacy Ratio, Credit Interest Income, and size of the organisation or corporate had a positive effect on financial performance (Elshaday *et al.*, 2018). In some public organisations, the political system played a significant role in financial Condition (Garcia-Sanchez *et al.*, 2012). Some scholars also suggested that cost-efficiency and effective financial management could determine Financial Condition (Cuadrado-Ballesteros and Bisogno, 2019; Zafra-Gómez *et al.*, 2009, 2010). Although some predictors of financial Condition have been revealed, these studies merely focused on the system and management of financial performance. Human resources and other resources have not received much attention, even though organisations demand a certain level of resources to perform effectively.

Considering the important roles of resources, the Resource-Based Theory (Barney, 1991) supports the notion that Human Capital and Physical Capital provides significant resources for maintaining Financial Condition. Human capital becomes considerably important because it is a source of innovation and strategy renewal. Human Capital is related to any knowledge, skills, abilities and attitudes owned by personnel in organisations that are highly supportive for organisational success (Perrotta, 2018). Further, it can be fostered from applied research, management objective, reengineering process and improvement or development of workforce skills. Furthermore, Human Capital creates incremental values to organisations daily via motivation, commitment, competence and effectiveness of teamwork. However, each organisation offers distinctive approaches to managing Human Capital, which also means different values (Lepak and Snell, 2002). Thus, human capital provides unique contributions to Financial Condition based on unique approaches given by the organisations.

In addition to Human Capital, Physical Capital also adds incremental variance to the successful Financial Condition. The notion of Physical Capital includes natural resources and other technological devices (Galor and Moav, 2004). The existence of Physical Capital supports the improvement of the Financial Condition of an area. To illustrate, the development of the primary physical conditions such as sanitation, clean water, and electricity in an area will also help foster the services and welfare for the community, which may later improve Financial Condition.

Physical Capital is also helpful for creating additional values to producing desired input. Thus, it is reasonable to conclude that both human and physical resources act together to influence a region financial condition.

The direct effect of these two capitals (i.e. human and physical) may have been moderated by the level of control performed by the organisations. In Indonesia, some empirical investigations conducted by Chandra (2017) and Sari and Fitriani (2009) found that the management control system improved Financial Condition. In these two studies, Human Capital and Physical Capital directly impacted financial performance where the organisations had sufficient control over the resources. As a result, the organisations performed better and showed expected Financial Condition.

The concept of Control theory in strategic human resource management from Snell (1992) has provided a clear argument on how high control facilitates the positive effect of human capital and physical capital on desired Financial Condition. According to the theory, Human Capital and Physical Capital will leverage financial performance only if an organisation implement a certain degree of control over human capital inputs, behavioural controls, and desired outputs. This further suggests that possessing a management control system favours Human and Physical Capital's effect on Financial Condition.

Accordingly, management control system becomes a moderating variable in creating good Financial Condition for one particular region. In a developing country like Indonesia, the management control system is one of the most vital foundations of good governance (Purnomo, and Budiawan, 2014). The internal control system includes various management tools that aim to achieve a broad range of objectives. Besides, Riawan (2016) stated that the management control system could improve an organisation's Financial Condition. Meanwhile, Masyur (2016) postulated that local governments encounter difficulties implementing a good control system strategy because of the absence of synergy between Human Capital and the control strategy. Subsequently, this made the public services became less efficient. Control becomes a crucial element to ensure that Financial Condition is achieved as expected.

The management control system consists of management control structures and processes (Halim et al., 2012). The control structure is centred on a variety of responsibility, while the management control process includes budget preparation, implementation and measurement, reporting, and analysis. In management control, the decisions are made based on the procedures and other schedules carried out repeatedly year after year. Those procedures usually start from programming. The program is translated into a budget, and then the company operates based on a predetermined budget, procedure and policy. The final results are then compared with the budget after being evaluated and improved if necessary. Since the procedure is carried out repeatedly every year, then management requires a management control system to improve its performance so that the company's goals can be achieved.

By applying the Resource-Based Theory and Control theory in Strategic Management, one should capture that the presence of high management control will leverage the effect of human and physical capital on financial Condition. However, some contextual conditions may also influence this argument. For instance, as a developing country, Indonesia implements a decentralisation

policies that also include financial autonomy for its provinces. Consequently, some experts and practitioners have questioned some antecedents related to regional financial performance.

Law No. 23 of 2014 states the implementation of regional government directed to accelerate the realisation of community welfare through improving services, empowerment, and community participation, as well as enhancing regional competitiveness by taking into account the principles of democracy, equality, justice, and uniqueness of the area in the system of the Unitary State of the Republic of Indonesia. Regional autonomy is a part of decentralisation. It constructs each region to have the right and obligation for regulating their area but with the control of the central government and following the law. Fiscal decentralisation is implemented in order to encourage several levels of government that can control each region. The local governments will accommodate the aspirations of a community. The success of regional autonomy is integrated with the ability of a region to manage the funds. Also, the local governments should be able to utilise the resources that are already owned by the region. Therefore, the success of a regional autonomy significantly is related to the Financial Condition of the region.

Unfortunately, contrasting views emerged regarding Human Capital and Physical Capital's effect on Financial Condition in Indonesia. For instance, Nirwana and colleagues (2014) found that Human Capital and Physical Capital had a non-significant influence on Financial Condition. However, they found it emerged after intervening through the culture. At the same time, Zulkifli et al. (2018) found contrasting findings where Human Capital and Physical Capital positively affected Financial Performance. Another finding suggested that the differences were caused by the influence of Indonesia's national culture. The level of uncertainty was higher in Indonesia than in Australia, which later reduces any resources on financial performance (Graham and Sathye, 2017).

Additionally, pressure from the central government has imposed some policies in managing the budget in local government. Although provincial governments had adapted a new accounting system, the local officials found it difficult to maintain a well-controlled and structured system (Harun and Kamase, 2012). In a similar vein, Mir and Sutiyono (2013) have discovered that the demand, supply, and quality of Indonesia's local accounting system lacked parity, which also means the financial system implemented less effective control. This, then, causes a subsequent effect on the local financial performance as effective decision-making and efficient management would be difficult to implement. Thus, in this situation exhibiting an effective control in managing resources lead to better financial performance.

This investigation is necessary to understand further the antecedents of Financial Condition and the role of effective management control. This study will also shed light on the importance of human and physical capital in developing regional financial Condition. Local governments in Indonesia may have undergone less effective control over the accounting system and failed to address the issue since their financial reports were in a category of acceptable without exceptions. Sulawesi Selatan, in this case, acted as the main gate of Eastern Indonesia, where many essential businesses happen. Despite the prestigious Financial Condition, this local government was imposed to implement regulation from the central government. Additionally, some resources may have been used to support the financial performance. However, more empirical information is necessary to explore whether those resources influence Financial Condition or not.

Then, the theory and empirical evidence led this study to exert a management control system as its moderating variable on observing the influence of Human Capital and Physical Capital on the Financial Condition of the area chosen in this study. Fiscal decentralisation is a government policy to increase the ability of an area to manage its region. The local governments faced difficulties implementing effective control system strategy because they were unable to link the relationship between Human Capital and the control strategy. As a result, it caused the public services became less efficient.

Having considered the above discussions, the research objectives are formulated as follows;

1. To examine the effect of Human Capital on Regional Financial Condition
2. To examine the effect of Physical Capital on Regional Financial Condition
3. To examine the moderating effect of the Management Control System on the effect of Human Capital and Physical Capital on Regional Financial Condition.

## **LITERATURE REVIEW AND HYPOTHESES**

The Public Sector Accounting Board (2007) defined the Financial Condition as the health of government financial performance indicated by their ability to fulfil the financial obligations and the service commitments to the public, creditors, employees and others. According to Dinapoli (2011), Financial Condition is the ability of the local governments to comply with the expenditure budget by taking the source of local revenue and continue providing services to the community.

Financial factors in Nirvana et al. (2014) are a financial distribution run by the financial system. The financial system seeks to ensure sound financial judgment and cover-up liquidity. According to Dinapoli (2011), the indicators of financial factors are the debt limits, the tax potential, and the legality of expenditure. According to Dinapoli (2011), institutional factors are management practices and the existence of policies or regulations of local governments that guarantee the implementation of healthy governance. Furthermore, the institutional indicators are the budget and financial variance, the timeliness and accuracy of financial transactions, and the quality and timeliness of financial reporting.

In addition, Dinapoli (2011) stated that the Financial Condition are determined by a combination of government environment, institutional and financial factors. For example, when there is a decrease in the population, so there will be a reduction in the tax revenue (negative environmental factors). However, the government can overcome this by reducing services, increasing the tax rate, and striving to develop economic resources, which ultimately determine the Financial Condition of the local governments.

Financial Condition at a regional level can be influenced by several factors such as CEO power (Daily and Johnson, 1997), environmental and operational management (Sueyoshi and Goto, 2010), and technical performance (Kristensen *et al.*, 2008). These antecedents can be grouped into two types of resource, namely human capital and physical capital. The former was workforce competencies (e.g. knowledge and skills), while the latter is more related to technology, devices, and equipment used to perform tasks in organisations. The human and physical capital will be the most two precious antecedents of an organisation's Financial Condition.

The notion of human and physical capital as critical antecedents of financial Condition has been supported by a theoretical perspective. A resource theory or commonly called Resource-Based Theory (RBT), uses a resource-based approach to analyse competitive advantages (Barney, 1991, 2001). The theory is used as a supporting theory in this study to see the effect of Human Capital and Physical Capital on regional Financial Condition. The key to the RBT approach is a strategy of understanding the relation between valuable resources, organisation capabilities, competitive advantage, and profitability. In the end, all those resources should particularly provide supports for maintaining the competitive advantage over time.

The theory was first introduced by Wernerfelt (1984) in his work entitled “*A Resource-based View of the Firm*”. However, most of the researches referred to Barney’s (1991) seminal work. The firm resources explained how to help the company in improving the efficiency and effectiveness of operations. Furthermore, the competitive advantage can be understood by instilling an understanding of the company consists of heterogeneous and immovable elements. The steps in maximising the company’s competitive advantage should fit into the four criteria: valuable, awareness, inimitability, and non-substitutability.

According to RBT, the resources can be generally defined by including the assets, organisational processes, organisational attributes, information, or knowledge controlled by the organisations that can compile and imply the strategies. Regardless of the number of resources, the RBT categorises the resources into three major types;

- a. Physical Capital (e.g. technology, manufacturing, and equipment)
- b. Human Capital (e.g. training, experience, insight)
- c. Organisational capital resources (e.g. formal structural)

Using the framework of the RBT, both Human and Physical Capital can maintain the quality of Financial Condition in an organisation, including public organisation such as provincial governments. Human Capital would provide the organisation with desired human resources, directly influencing the quality of Financial Condition. Financial Condition needs skilful personnel and experts to secure the accountability of the reporting system, for example. The existence of these expected workforces will sustain the quality of Financial Condition. The same case applies to Physical Capital. An organisation with ready-to-use tools, devices, and equipment will be more likely to exert those tools to support the organisation’s achievement and provide support for Financial Condition.

The concept of RBT, in this case, also asserts that Human Capital and Physical Capital are able to create an organisation’s competitive advantage to generate incremental values for the organisation. The value referred to the better performance in an organisation, including financial performance. Throughout the application of adequate Human Capital and supportive Physical Capital, provincial offices can provide more sufficient and complete information towards better Financial Conditions (Ghozali and Chariri, 2007). Thus, the first two hypotheses are as follows:

Hypothesis 1 (H1): Human Capital has a positive effect on the Regional Financial Condition

Hypothesis 2 (H2): Physical Capital has a positive effect on Regional Financial Condition

The supports from the two resources may not always provide desired effect on Financial Condition due to some conditions. For instance, previous studies have documented that organisational culture (Yesil and Kaya, 2013) and gender (Campbell and Mínguez-Vera, 2008) determined financial performance. Certain cultures may hinder the implementation of supportive human and physical capital. Likewise, gender-related injustice also impedes effective Human Capital management. It appears that there is some degree of control that may potentially influence the effect of some resources on an organisation's financial achievement. It is plausible that the level of control presumably moderates the two key resources' effect on Financial Condition.

Human Capital and Physical Capital depend on the degree of control applied by organisational management. Management Control becomes much more critical in ensuring that the human and physical resources are in place to support Financial Condition. Anthony and Govindarajan (2005) stated that "Management control is a process by which managers influence other organisational members to imply the organisational strategies". It is also a process of detecting and correcting errors for accidental or intentional work. Since its focus is on humans and implementing plans, management control requires strong psychological resources. Activities such as communication, advising, encouraging and criticising are essential parts of this process. Management control utilises task control to ensure effective and efficient work by considering three critical areas: budgeting, economic value-added, and balance scorecard (Otley, 1999).

Control Theory of Strategic Human Resource Management (Snell, 1992) proposed that as an organisation expects a certain level of performance, it must implement a high degree of control over human resource management, particularly when the goals and incentives are less clear. This theory also suggests that control depends on the degree of standard exhibited by organisations. As goals and incentives are less known and the cause-effect knowledge of management seems a blur, high control is highly needed. Organisations may suffer from underachievement performance or serious issues related to organisational attainment.

The same case also applies to the Financial Condition. Using this Control theory perspective, public sector financial condition at the regional level potentially requires some control in managing Human Capital and Physical Capital. The control should start from input, behavioural, and finally outputs. Human Capital management could support financial Condition when the input (e.g. recruitment and selection) is practised with systematic control. Behavioural control is related to personnel's behaviours which also require control to direct personnel towards targeted goals. Output control means organisation, stakeholders, and employees should have a crystalised standard of the desired output, and this standard is deemed to guide human capital management. Thus, the higher control implemented by the organisations, the more positive the effect of Human Capital on Financial Condition.

Physical capital also demands specific control in order to bring a positive impact on Financial Condition. As proposed by the Control theory (Snell, 1992), a clear and crystalised standard is vital in developing control. Thus, a certain degree of control is essential to ensure that the physical resources are utilised to attain organisational goals. According to the theory, input, behavioural, and output control are three control systems elements. Physical Capital should also be controlled using this concept. Organisations with a high degree of physical resource control would carefully consider physical input, control personnel behavior in using physical assets or

resources and evaluate physical utility output with caution. By implementing this system, the positive effect of Physical Capital on Financial Condition will be considerably improved.

Latham and Locke (1979) also have strengthened the argument that a high degree of control may cause the financial resources (i.e. human and physical capital) are even impactful. The goal-setting theory (Latham and Locke, 1979; Locke *et al.*, 1981; Tosi *et al.*, 1991) postulates that clear and specific goals are proven to be more effective than “do your best” goals. The goals impact organisation as the degree of clarity is high, which also applies to Financial Condition. An organisation could perform a better Financial Condition as the control over Human and Physical Capital are more standardised and crystallised. Similarly, Snell (1992) found that clear standard played an essential role in developing a better control system.

Given the vital role of control, this study proposes a management control system to control how the strategy in the company runs according to plans and objectives. According to Purnamasari (2009), to encourage companies to compete in increasingly fierce global competitions, professional managers must perform Management Control System. It is a process and structure systematically arranged by management in controlling activities so that the company's goals and objectives can be achieved. Therefore, Management Control System will moderate the effect of Human Capital and Physical Capital on Financial Condition. The last two hypotheses will be:

Hypothesis 3 (H3): Management Control System moderates the relationship between Human Capital and Financial Condition

Hypothesis 4 (H4): Management Control System moderates the relationship between Physical Capital and Financial Condition

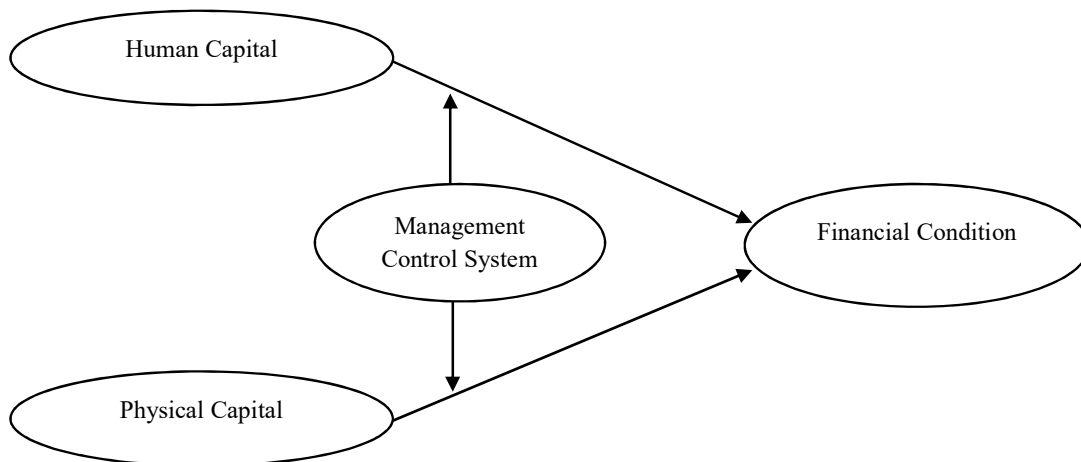


Figure 1. Theoretical Framework

## METHOD

### *Participants*

Participants were employees of the Regional Financial and Asset Management Agency who served as the member of the Financial Report Compilation team in the Golden Triangle area of South Sulawesi. According to the human resource department, more than 100 employees worked in this team, and their jobs were related to financial evaluation and audit. Researchers had limited access to some information due to confidentiality reasons. The study was advertised to the three organisations, and participation was voluntary. The South Sulawesi Golden Triangle region was formed from a path connecting the capital city and two big cities in South Sulawesi (Makassar, Gowa and Maros). Some participants worked as Secretary, Budgetary, Treasury, Accounting and Information Technology and Regional Assets. This study recruited five people in each division to obtain a sufficient sample, resulting in 25 participants in each region. Since there were three regions, this study received responses from 75 participants in total. By implementing the *G\*Power* analysis, the number of participants ( $n=75$ ) had enough power to eliminate the type II error (Faul *et al.*, 2007). The number of female participants was 53%, and male 47%, with most participants, had bachelor degrees (81%) and some post-graduate degrees (19%).

### *Measures*

This study employed measures which the researchers developed following the theory of each variable (Brislin, 1970; Hinkin *et al.*, 1997). There are four measuring instruments in this study. The following table 1 describes the construction of the measure:

Table 1. *Operational Variable*

Variable	Dimension	Indicator
<i>Human Capital</i> (Mignonedan O'Neil, 2005)		<ol style="list-style-type: none"> <li>1. Special Competence</li> <li>2. Work Experience</li> <li>3. Skill</li> </ol>
<i>Physical Capital</i> (Baldi, 2013)		<ol style="list-style-type: none"> <li>1. Availability of Natural Resources and the Environment</li> <li>2. Government Investment</li> <li>3. Facilities and Infrastructure (e.g., Computer and Internet Networks)</li> </ol>
Management Control System (Prabawati, 2010)		<ol style="list-style-type: none"> <li>1. Strategic Planning</li> <li>2. Implementation and Measurement</li> <li>3. Evaluation</li> </ol>
Financial Condition (Dinapoli, 2011)	Environment	<ol style="list-style-type: none"> <li>1. Community needs</li> <li>2. Population</li> <li>3. Property Value</li> <li>4. Inflation</li> <li>5. Individual income</li> <li>6. Budgeting</li> </ol>
	Organisation	<ol style="list-style-type: none"> <li>1. Budget Cost</li> <li>2. Timeliness and accuracy of financial transactions</li> </ol>

		3. Quality and timeliness of financial reporting
	Financial	1. Limitation of Debt 2. Potential Taxes 3. Legality of Expenditures

All the measures were developed in Bahasa Indonesia using a 5-point Likert-type scale (1= Strongly Disagree to 5= Strongly Agree). Human Capital Scale, Physical Capital Scale, and Management Control System Scale consisted of three items, while the Financial Condition Scale had 12 items. The items included “the organisation has many employees with special competence to accomplish challenging tasks” and “the organisation has implemented a well-designed evaluation system.” The measurement model, including construct validity and reliability, was examined to provide adequate support for the measurement model.

To test the measurement model, this study performed a Confirmatory Factor Analysis (CFA) with four measures (i.e., Human Capital, Physical Capital, Management Control System, and Financial Condition). The hypothesised model was tested against other alternative models. The fit indices confirmed that the hypothesized model showed a better fit ( $cmin/df= 1.2$ ,  $p > 0.05$ ,  $RMSEA= .05$ , and  $SRMR= .04$ ) than the two-predictor model where Human and Physical Capital were combined ( $cmin/df= 2$ ,  $p > 0.05$ ,  $RMSEA= .08$ , and  $SRMR= .08$ ) and the single-predictor model where all predictors and Management Control System were combined in the model ( $cmin/df= 4$ ,  $p > 0.05$ ,  $RMSEA= .09$ , and  $SRMR= .098$ ). These results suggested that the data had four independent constructs confirming the proposed theoretical model. Outer loading value indicated that the convergent validity of the data had coefficients above 0.50 for each item and the  $t$ -value for each item above 1.96. Also, the Average Variance Extracted (AVE) value in each construct variable was greater than 0.50. Based on the results, all constructs in the proposed theoretical model fit into the convergent validity criteria. Those can be seen in the following table:

Table 2. *Average Variance Extracted (AVE)*

Variabel	AVE
Human Capital	0.617
Physical Capital	0.600
Management Control System	0.534
Financial Condition	0.702

Source: Primary data

The reliability test aims to examine the composite reliability of each measurement construct. The results suggested that the constructs had composite reliability coefficients above 0.70 (see table 3), confirming all the constructs had acceptable reliability.

Table 3. *Composite Reliability*

Variable	Composite Reliability
Human Capital	0.826
Physical Capital	0.818

Management Control System	0.931
Financial Condition	0.976

Source: Primary data

### ***Procedure***

This research was part of a larger research program conducted by the regional financial institution. Data collection was conducted using a three-wave data collection technique to avoid common method biases (MacKenzie and Podsakoff, 2012). The survey booklets were delivered to the Human Resource Department (HRD) Office, and the HRD personnel sent the booklets to the potential participants. In the first phase, researchers collected demographic, human capital and physical capital data. After a week, researchers collected data for the Management Control System and the following week the Financial Condition data. Participants were asked to complete the questionnaire from the beginning to the end of the data collection, which lasted for one month. All participants ( $n= 75$ , 100%) fully participated in the study from the beginning to the end of the data collection. Informed consent was obtained from each participant in the beginning of the data collection. This study followed and obeyed the ethical standards of the institutional and national research committee of Indonesia. Study protocol number UH.EB.005.01.03.20 was reviewed and approved by the Research Ethics Committee at Universitas Hasanuddin in Indonesia.

## **RESULTS AND DISCUSSION**

### ***Results***

This study conducted several stages in the data analysis. First, the data were analysed using descriptive statistics and the bivariate correlation technique. Secondly, the relationship between variables was tested using Pearson Product-moment Correlation. Lastly, the Hierarchical Moderated Regressions test (Anderson, 1986) was conducted to answer hypotheses.

Table 4. *Descriptive Statistics and Bivariate Correlations*

	<i>M</i>	<i>SD</i>	1	2	3	4	5	6
Human Capital	11.43	1.21	-					
Physical Capital	11.79	1.23	.52**	-				
MCS	12.12	1.15	.45**	.54**	-			
FC(Environment)	22.90	2.52	.53**	.56**	.73**	-		
FC(Institution)	12.17	1.22	.30**	.34**	.62**	.78**	-	
FC(Financial)	12.26	1.35	.46**	.46**	.67**	.72**	.64**	-
FC Total	47.33	4.63	.50**	.53**	.76**	.86**	.87**	.85**

Note:  $N= 75$ ,  $M=$  Mean,  $SD=$  Standard Deviation, MCS= Management Control System, FC= Financial Condition, \*\* $p<.01$

Table 4 above showed the means and standard deviations for each variable in the study. In addition, the relationship between variables was presented. Generally, all variables in the study were positively and significantly correlated. The level of relation between these variables ranged from  $r= .34$  ( $p <.01$ ) to  $r = .86$  ( $p<.01$ ). The Human Capital had a strong correlation with the

Financial Condition ( $r = .50, p < .01$ ), and so did the Physical Capital ( $r = .53, p < .01$ ). The relation between the Management Control System and the Financial Condition was even stronger with the correlation coefficient of  $r = .76 (p < .01)$ . The results indicated that the two independent variables (i.e. Human Capital and Physical Capital) and Management Control System had a strong positive relationship with Financial Condition.

After performing the descriptive statistics and bivariate correlation, the Hierarchical Moderated Regressions analysis was performed. In this study, the regression technique was considered appropriate to examine the contribution of each predictor in different regression models (de Jong, 1999). The following were the results of the analysis:

Tabel 5. *Moderated Regressions with Financial Condition as Dependent Variable*

Model		$R^2$	$Adj. R^2$	$\Delta R^2$	$\Delta F$	$\beta$
1	Human Capital	.25***	.24	-	24.81	.50***
2	Human Capital Physical Capital	.35**	.33	.10**	10.86	.31** .37**
3	Human Capital Physical Capital HC*MCS	.36**	.34	.01	1.47	.32** .37** -.12
4	Human Capital Physical Capital HC*MCS PC*MCS	.43**	.40	.06**	7.98	.33** .33** -.33** .34**

Note:  $N = 75$ ,  $\Delta =$  change,  $\beta =$  Standardized Beta Weight, HC= Human Capital, PC= Physical Capital, \*\*\* $p < .001$ , \*\* $p < .01$

This analysis technique allowed researchers to capture the incremental contribution of each predictor in the models. Before running the analysis, all predictors and the moderating variable were mean-centred to eliminate the risk of multicollinearity (Hayes, 2013). With Human Capital as the only predictor, the first model showed a significant impact on the Financial Condition ( $Adj. R^2 = .25, p < .001$ ). In the second model, Physical Capital was entered, and it contributed a positive and significant added value to the Financial Condition ( $\Delta R^2 = .10, p < .01$ ). In model 3, the interaction between Human Capital and Management Control System did not significantly increase the variance of the Financial Condition ( $\Delta R^2 = .01, p > .05$ ). Model 4 was the regression model that gave the highest contribution to the variance of the Financial Condition ( $\Delta R^2 = .06, p < .01$ ). In model 4, all predictors and the two interactions significantly predicted Financial Condition. However, the interaction between Human Capital and Management Control System contributed a negative effect on Financial Condition.

The analysis showed that the impact of Human Capital on Financial Condition was positive and significant across all regression models. When there were no other variables in the model, the impact of Human Capital on Financial Condition tended to be strong ( $Adj. R^2 = .24, \beta = .50, p < .001$ ). The impact of Human Capital on Financial Condition remained positive and significant

across all the regression models, including in model 4 (Adj.  $R^2 = .40$ ,  $\beta = .33$ ,  $p < .001$ ). Based on these results, Human Capital had a positive effect on the Financial Condition, which provided support for H1. The presence of Physical Capital to predict Financial Condition also had a positive impact on all regression models. In model 4, Physical Capital had the same effect as Human Capital (Adj.  $R^2 = .40$ ,  $\beta = .33$ ,  $p < .001$ ). The results also provided support for H2.

In model 4, the interaction between Human Capital and Management Control System contributed negatively to Financial Condition ( $\beta = -.33$ ,  $p < .01$ ). The impact of Human Capital on Financial Condition depended on the level of the Management Control System. The higher the Management Control System, the lower the impact of Human Capital on Financial Condition, and vice versa. This finding supported H3 that stated the Management Control System moderated the relationship between Human Capital and Financial Condition. However, one should note that Management Control System could weaken the effect of Human Capital on Financial Condition.

The interaction between Physical Capital and Management Control System also significantly impacted the Financial Condition ( $\beta = .34$ ,  $p < .001$ ). The impact of this interaction was positive, indicating that the effect of Physical Capital on the Financial Condition would increase when the Management Control System was high. Conversely, if a low Management Control System could reduce the impact of Physical Capital on the Financial Condition, these results provided support for H4.

The last regression model (model 4) showed  $R^2 = .43$  ( $p < .01$ ), or the model explained 43% of the variance in the Financial Condition. This finding considerably explained a large portion of Financial Condition in the organisations.

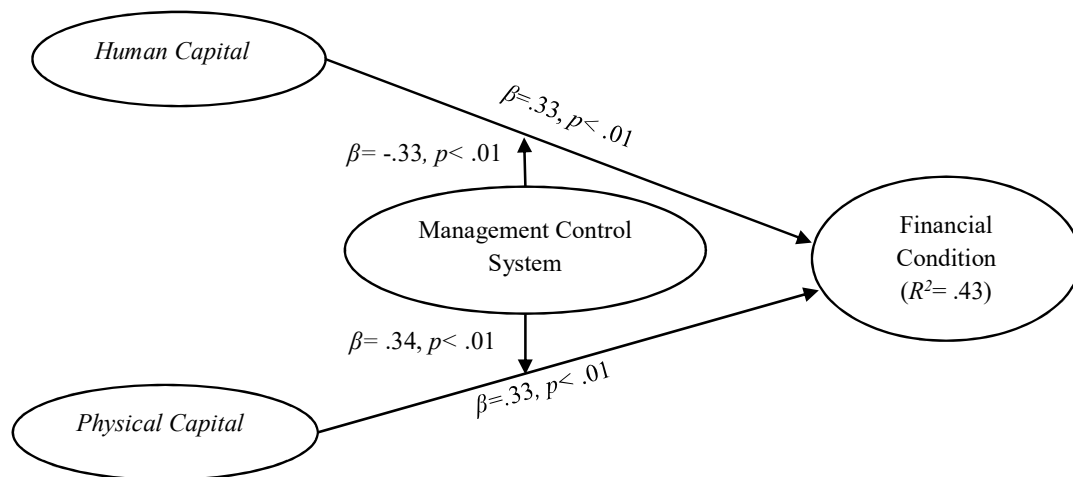


Figure 2. Empirical model and coefficients

Figure 3 below illustrates the interaction between Human Capital and Management Control Systems in predicting Financial Condition. The graph explained that the value of the prediction model was higher when the Management Control System was at a low level ( $R^2 = .16$ ), compared to when it was at a high level ( $R^2 = .13$ ). The existence of a high Management Control System could reduce the impact of Human Capital on Financial Condition.

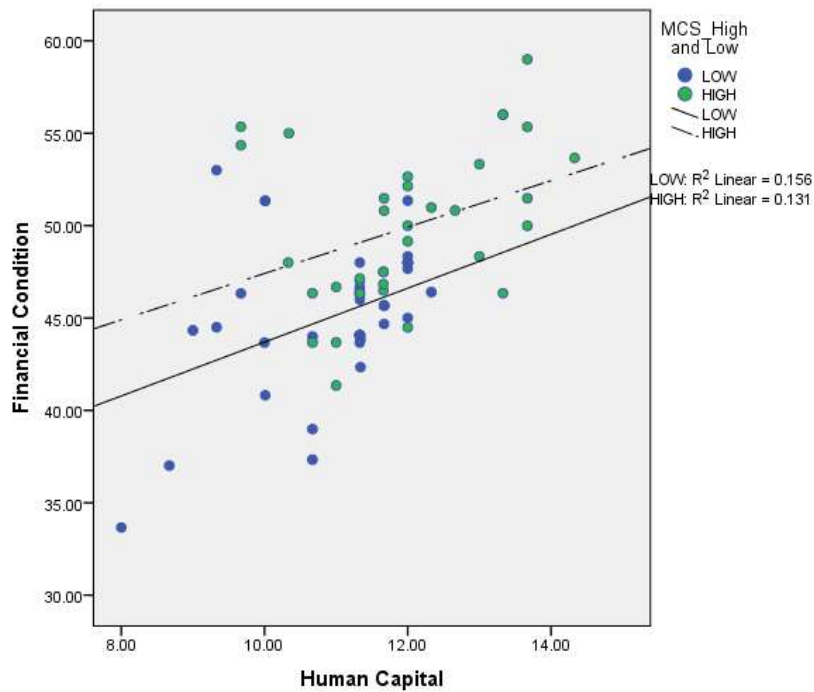


Figure 3. *Interaction between Human Capital and Management Control System*

The interaction between Physical Capital and Management Control System can be seen in Figure 4. Unlike the previous interaction model, the interaction in figure 4 showed that the impact of Physical Capital on Financial Condition was stronger when the Management Control System was also at a high level ( $R^2 = .22$ ) compared to low levels ( $R^2 = .07$ ). A high Management Control System could support the positive impact of Physical Capital on Financial Condition.

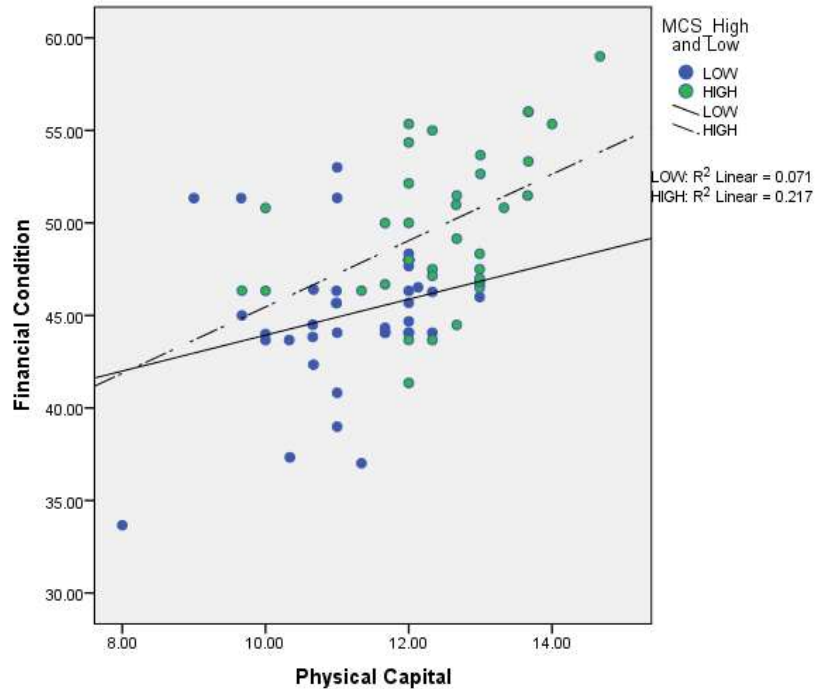


Figure 4. Interaction between Physical Capital and Management Control System

## DISCUSSION

### *The Effect of Human Capital on Financial Condition*

The analysis showed that Human Capital had a positive influence on Financial Condition. Based on the analysis, the higher Human Capital (e.g., competencies, work experience and skills), the more likely Financial Condition leverages in the golden triangle areas. This suggests that Human Capital affects environmental, institutional, and Financial Conditions. In this study, a successful Financial Condition referred to the environment, institution and financial dimensions.

Firstly, within the environmental dimension, there were community needs, populations, property values, inflation, individual income, and budgeting, all of which were necessary to establish a stable Financial Condition. Secondly, human resources also contribute to institutional financial performance. Human Capital aspects support the organisation strategy, including the availability of budget, timeliness and accuracy of financial transactions, quality, and timeliness of financial reporting. Lastly, the workforce competence also supports the financial dimension, including debt limits, tax potential and legality of expenditure. Successful financial dimension, in this regard, relied upon the workforce competence. Human capital serves as a means to monitor debt limits and tax management, for example. The increase (or decrease) in Human Capital will influence the regional Financial Condition. This notion has been previously supported by Zulkifli (2018), Ramli et al. (2014), Nimtrakoon (2015), Ervina et al. (2008), Is et al. (2014).

The RBT (Barney, 1991, 2001) has explained the importance of valuable and rare resources in fostering organisation competitive advantages. Human Capital also acted as a valuable resource for organisational success, including financial achievement within the organisation. As the organisation maintains sufficient quality of Human Capital, the workforce will strive to facilitate

sustainable financial performance. Thus, according to this study, the RBT successfully explained the role of Human Capital in predicting Financial Condition.

Special competence, work experience, and skills became important points in improving Financial Condition because those could be an essential part of improving the organisation's innovation, strategies, and objectives. In this study, participants perceived that the development of Human Capital increased the regional government's ability to improve the economy and maximise its potential. This research postulated that the role of Human Capital in a regional government needed to be reconsidered because Human Capital can strengthen the goal attainment of a regional government.

### ***The Effect of Physical Capital on Financial Condition***

The results showed that Physical Capital had a positive effect on Financial Condition. The level of Physical Capital in terms of the availability of natural resources and the environment, government investment, facilities and infrastructure (e.g. computers, internet access) had a significant impact on Financial Condition in the three regional areas. Physical Capital contributed positively to Financial Condition, including fostering environmental, institutional, and financial aspects.

As mentioned earlier, there are three distinct dimensions of Financial Condition, namely the environment, institutions and finances. These three dimensions depict the local government's financial performance in South Sulawesi (i.e. Makassar, Gowa and Maros). In improving Financial Condition, the regional governments should take into account the community needs, populations, property values, inflation, individual income and budgeting. The second dimension was the institution, which covers budget availability, timeliness and accuracy of financial transactions, and the quality and timeliness of financial reporting. The third dimension was finance which covered debt limits, tax potential and legality of expenditure.

The RBT has supported that Physical Capital (e.g. technology) has provided valuable resources for the governmental organisations in South Sulawesi, Indonesia. This empirical study has supported the theory and previous findings. Physical Capital had a significant positive influence on the regional government's Financial Condition in these three regions. Barney (2001) proposed that the competitive advantages of an organisation can be achieved by utilising the existing valuable and rare resources in the organisation. Consistently, in the case of local government organisations in Indonesia, it appeared that Physical Capital added a significant amount of incremental variances to the development of Financial Condition. Physical assets, technologies, devices and other facilities were viewed as the essential elements of a successful Financial Condition.

This study was also in line with research conducted by Zulkifli (2018), Nimtrakoon (2015), Ervina et al. (2008), Is et al. (2014). However, the effect could be indirect as other variables might influence the relationship. For example, Nirvana et al. (2014) discovered that Cultural Capital moderated the Physical Capital - Financial Condition relationship. Therefore, this study also considered testing the moderating effect of the Management Control System in the relationship.

Limitations of Physical Capital often became a problem of a local government regardless of the quality of Human Capital. Generally, regions with outstanding Human Capital would be

more developed if juxtaposed with the availability of natural resources and the environment, adequate government investment, facilities and infrastructure. In this study, participants considered that Physical Capital, in the form of technologies, facilities, and infrastructures, provided significant support for the region's Financial Condition.

### ***The Moderation Effect of Management Control System on the Relation of Human Capital and Financial Condition***

Apart from the direct effect of Human Capital on Financial Condition, this study also found that Management Control System moderated the effect of Human Capital on Financial Condition. This research was supported by the Control Theory (Snell, 1992) as the theory stated that managing human resources must be supported with input, behavioural, and output control. In addition, the Control Theory and the Goal Setting (Latham and Locke, 1979) postulated that clear and crystalised standard potentially emphasise the effect of resources. Besides, the goal-setting principles have stressed enough the importance of specific and clear goals. These theories have supported the notion that organisations with supportive human resources, but unspecified goals and rules would experience constraints to rise their Financial Condition.

This study discovered interesting findings related to the moderation effect of the Management Control System. The presence of a lower degree of Management Control System could trigger improvement in local government organisation. In contrast, a high degree of Management Control System would reduce the effect of Human Capital on Financial Condition. The theories have supported that Management Control System facilitated the Human Capital – Financial Condition relationship. The moderating effect seems to be more positive as the theories suggested that a clear and specific goal in human resource management could improve Financial Condition. However, this study showed opposing evidence as the moderating effect was found to be negative. This indicated that the existence of a Management Control System could weaken the role of Human Capital on Financial Condition.

In the local government areas, Human Capital significantly determined the fluctuation of Financial Condition. However, as the Management Control System implemented with a considerably high degree of input, behavioural, and output control, Human Capital would be less influential. The Management Control System improves Human Capital management by standardising control over the input quality, specifying work behaviour, and directing control to attain desired output. The government officials could have perceived Human Capital as an insignificant resource as the human resources management was highly controlled. The regional governments could have discarded the importance of Human Capital for Financial Condition as they perceived a high Management Control System.

The results of this study were in line with the research conducted by Chandra (2017), Ong et al. (2016), Rachma (2014), where they all found that the Management Control System had a significant influence on Human Capital and Financial Condition. However, scholars and government officials should consider how the Human Capital and Management Control System interact to predict Financial Condition. As the Management Control System increases, the Human Capital impact on Financial Condition declines. Thus, organisations with a flawed Management Control System may require high quality of Human Capital to improve financial conditions.

### ***The Moderation Effect of Management Control System on the Relation of Physical Capital and Financial Condition***

This study also indicated that the Management Control System moderated the effect of Physical Capital on Financial Condition. The relation between Physical Capital and Financial Condition increased as the Management Control System was included in the prediction model. As predicted previously using the Control Theory by Snell (1992), a high degree of control over input, behaviour, and output improved the quality of Physical Capital. In this respect, Physical Capital could be more influential as the Management Control System ensured its quality by controlling input of physical resources, controlling behaviours in utilising the resources, and directing the outputs of resources. This study suggested that as the Management Control System increases, it improves the effect of Physical Capital on Financial Condition.

Unlike the former moderating effect, Management Control System and Physical Capital went hand-in-hand in predicting Financial Condition. It indicated that the effect of Physical Capital on Financial Condition depended on the degree of the control system within the organisation. Organisations with abundant Physical Capital may not always lead to high performing Financial Condition unless they implement a favourable Management Control System. This sheds light on the importance of the Management Control System in facilitating the role of Physical Capital. Hypothetically, if the organisations aim to have fewer physical resources, managing the resources using the Management Control System principles will accentuate the effect of the resources on the organisations' Financial Condition.

The results were in line with some previous investigations conducted by Chandra (2017), Ong et al. (2016), and Rachma (2014). In those studies, Management Control System was one of the predictors of Financial Performance in organisations. The Management Control System's effect is vital as it serves as control over resources availability and quality. Anthony and Govindarajan (2005) stated that Management Control System was also a process for detecting and correcting errors at work.

In the regional government offices, the three golden areas of South Sulawesi may have relied on the Management Control System to attain an expected level of Financial Condition. In this regard, the regional government should strive to optimise control over the physical resources. The control system should manage the selection of equipment, human behaviours related to the application of the equipment and monitor the effectiveness of specific technologies or devices on outputs. Physical Capital positively predicts the regional government Financial Condition as far as the physical resources controlled with systematic procedure starting from input to output.

### ***Implications***

This research empirically examined the influence of moderating effect of Management Control Systems on the two antecedents of the regional Financial Condition; Human Capital and Physical Capital. The results supported that the perceived Management Control System significantly determined Human Capital and Physical Capital's effect on Financial Condition. However, this moderator behaved differently towards Human and Physical Capital in the regional

government organisations. Management Control System tended to alter the low quality of Human Capital while at the same time strengthen the Physical Capital – Financial Condition Relationship.

If the regional governments implement a high Management Control System, the Physical Capital will be more likely to foster Financial Condition. Unfortunately, this condition will also reduce the Human Capital's effect on Financial Condition. Albeit the organisations have exhibited sufficient workforce competence, it will have less impact on the Financial Condition as the Control System is highly managed. Presumably, outstanding Human Capital can tolerate a flawed Management Control System and still positively impacts Financial Condition. Control System is vital for directing the effect of resources on Financial Condition. However, in this case, the local government officials should be aware that increasing control over Human Capital can reduce the effect of human resources on Financial Condition. Human Capital in the local government areas may not impact financial performance as the organisations implement high control system.

### ***Limitations and Future Research Directions***

This study employed a set of questionnaire as valid and reliable measures of variables being studied. The initial attempt was to collect objective data. However, the existing objective data were not adequately standardised across different organisations. Accessing the data and information related to the objective financial record was also strictly prohibited. Likewise, researchers cannot find alternative objective data that measured the level of achievement of the whole existing variables, other than the perception of employees who work in the organisations. This study then used Subject Matter Experts (SMEs) perception of each variable, and this procedure had been permitted by the research ethics committees and the government officials. Therefore, future studies can repeat this method using objective data sources from government officials by establishing mutual collaborations.

Furthermore, although this research succeeded in involving representatives from all agencies with varying positions, the number of participants involved was still small compared to previous studies. By increasing the number of participants and involving more governmental organisations, future studies would provide more information regarding the effect of the control system in the regional government organisations.

### **CONCLUSIONS**

This study has two folds. Firstly, it contributed new information about the effect of two key resources (i.e. Human and Physical Capital) on financial performance in governmental organisations. Secondly, this study broadens our understanding of the unique role of the Management Control System in the local government organisations in South Sulawesi, Indonesia. The first part of the findings was consistent with the RBT as both Human and Physical Capital significantly predicted Financial Condition. However, the second part of the findings was mixed as Management Control System negatively moderated the effect of Human Capital while at the same time also positively moderated the effect of Physical Capital on Financial Condition. This study highlighted the importance of improving the standard of the control system in managing the local government organisations. Although it potentially reduces Human Capital's effect, a high degree of control will help organisations maintain and improve desirable Financial Condition.

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KEMENTERIAN PENDIDIKAN DAN KEBUDAYAAN  
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APPROVAL NOTICE

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Project Title	:	Human Capital and Physical Capital in Regional Financial Condition
Project ID	:	UH.EB.005.01.03.20
Project start date	:	10 January 2020
Project end date	:	10 January 2021

The above proposed project has been **approved** based on the information given in the application and its attachments. Please inform the *Social and Behavioral Research Ethics division at Universitas Hasanuddin*, if the above research project is discontinued before the expected date of completion. In addition, you are required to report anything which might warrant review of ethical approval of the protocol, this might include:

- serious or unexpected adverse impacts on participants
- Amendments in the protocol
- Changes to the research team

Please reach the office of Research Ethics at Fakultas Ekonomi dan Bisnis, Universitas Hasanuddin if this project requires amendments or extension. Your report is due on the completion of the project.

Makassar, 05 January 2020

Dekan,



Prof. Dr. Abd. Rahman Kadir, SE., M.Si., CIPM  
Fakultas Ekonomi dan Bisnis Universitas Hasanuddin

## INFORMED CONSENT

Title of Research: Human Capital and Physical Capital in Regional Financial Condition

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Makassar, Indonesia

1. Introduction and Purpose of the Study  
*This study aims to investigate employees' perception about their daily work routine which includes their idea about their performance and experience in the workplace.*
2. Description of the Research  
*In this study you will be asked to complete questionnaires. The questionnaire will come in three times in every two weeks. Each questionnaire will take up to 15 minutes to complete.*
3. Participation  
*We estimate there will be 100 employees participate in this study. They will come from the Regional Financial and Asset Management Agency team in the Golden Triangle area of South Sulawesi. As a participant, you will receive a survey booklet three times every two weeks. Your decision to participate in this study is complete voluntary. If you decide to not participate in this study, it will not affect the care, services, or benefits to which you are entitled.*
4. Potential Risks and Discomforts  
*You may experience some discomforts in filling the questionnaire. If you do not feel comfortable enough to answer the questions, you can stop at any point. You can withdraw from the study at any point and your decision will not affect your job, the care, service, or benefits to which you are entitled. This study and your participation will not impact your job or your performance report.*
5. Potential Benefits  
*People who participate in this study may better understand the link between human resources and financial condition.*