



Research Paper

Mediation of Inflation, GDP/Capita, Population Growth Rate in Palm Oil, Palm Kernel, Coconut on Exports in Indonesia, Malaysia, Nigeria, Thailand

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ABSTRACT: Research This for know influence and mediation of inflation, GDP/capita, population on palm oil, palm kernel, coconut on exports in 4 countries , namely Indonesia, Malaysia, Nigeria, Thailand from 1990-2020 . Study use approach quantitative with analysis regression multiple For test influence of palm oil, palm kernel, coconut on exports and analysis mediation influence of inflation, GDP/capita, population growth rate on the relationship between palm oil, palm kernel, coconut on exports application WarpPLS 7.0. Findings This disclose impact significant oil palm oil , palm kernel , coconut , inflation , GDP/ capita , and rate growth resident to growth export annually in these countries . Besides that, investigate effect mediation inflation, GDP/capita, and level growth resident to connection between variables studied and growth export. The result show effect significant mediation from variable the to connection between studied factors and growth export in various country context. However, influence mediation rate growth resident to connection between coconuts and growth export it turns out No significant.

KEYWORDS: Inflation, GDP/Capita, Population Growth Rate, Palm Oil, Palm Kernel, Coconut On Exports

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I. INTRODUCTION

Connection between export agriculture and growth economy has become interesting topic for researchers and makers policy. By specific, role oil palm oil, palm kernel, and coconut in growth export goods and services has studied in several countries, including Indonesia, Malaysia, Nigeria, and Thailand. Besides those, factors like inflation, GDP/ capita , and level growth resident has checked For know potency impact the mediation to connection this .

Although a number of study has find impact significant mediation from factors This to connection between export agriculture and growth economics, research other Not yet find effect significant mediation from factors This to connection between export agriculture and growth economy. For example, no There is effect significant mediation from level growth resident to connection between palm kernel and growth annual export goods and services in Malaysia and Nigeria. Likewise, no There is effect significant mediation of GDP/ capita to connection between oil palm oil, palm kernel, and coconut as well as growth annual export goods and services in Malaysia and Nigeria.

However, there are proof exists influence significant mediation of GDP/ capita to connection between oil palm oil and growth annual export goods and services in Indonesia and Thailand. Besides that, there is effect significant mediation from level growth resident to connection between oil palm oil and growth annual export goods and services in Malaysia and Thailand. Inflation is also evident have effect significant mediation to connection between oil palm oil and growth annual export goods and services in Indonesia, Malaysia and Thailand.

By overall, relationship between export agriculture and growth economy nature complex and influenced by a variety of factor. Journal This aim For explore role oil palm oil, palm kernel, and coconut in growth export goods and services in Indonesia, Malaysia, Nigeria, and Thailand, as well potency impact

mediation inflation, GDP/ capita, and population. level growth in relationships This. With study factors the journal This endeavor give outlook about impact economic and social from export agriculture in these countries and provide input for taking policy related development of these countries.

II. LITERATURE REVIEW

2.1 The Influence of Palm Oil on Annual Growth Exports of Goods and Services

There is a significant influence of palm oil on annual growth in exports of goods and services Based on the search results, there is evidence that palm oil has a significant influence on the annual growth of exports of goods and services in Indonesia and Thailand. Indonesia dominates exports of crude palm oil, processed palm oil, crude palm kernel oil and processed palm kernel oil with a share of 47.22%, followed by Indonesia at 45.19%, and Thailand at 6.45%. A study estimates that a 5% reduction in upstream product exports and a 15% increase in downstream product exports could increase Indonesia's foreign exchange. However, restrictions on Indonesian palm oil exports to the European Union will have a relatively small impact on Indonesia's total exports, namely less than 1%. (Jati, 2023) (Husin, et al., 2023)

There is no significant influence of palm oil on annual growth in exports of goods and services . Based on results search, no There is proof clear that oil palm have influence significant to growth annual export goods and services in Malaysia and Nigeria. Malaysia is producer oil palm biggest second in the world, and industry oil the palm Keep going develop during many years. However, no There is proof clear that oil palm have impact significant to growth export goods and services annually in Malaysia. In Nigeria, oil raw and gas are source main income government, and production oil raw palm it's not replacement oil raw in Nigeria. Even though Nigeria imports oil palm from Malaysia and Indonesia, impact oil palm to growth export goods and services annually in Nigeria still Not yet clear. (Nordin, 2020) (Saeyang & Nissapa, 2021)

H1 : There is influence palm oil has a significant impact on the annual growth of exports of goods and services in Indonesia, Malaysia, Nigeria, Thailand

2.2 The Influence of Palm Kernel on Annual Growth Exports of Goods and Services

There is a significant influence of palm kernel on annual growth in exports of goods and services . Based on results search, there is proof that palm kernel oil have significant influence to growth annual export goods and services in Indonesia, Malaysia and Thailand. Indonesia and Malaysia are producer palm kernel oil largest in the world, and they dominate export palm kernel oil crude and palm kernel oil processed. A studies estimate decline export product upstream by 5% and increase export product downstream 15% can be obtained increase Indonesian foreign exchange. In export palm kernel oil raw, Indonesia has superiority relative comparison tall compared to Malaysia and Thailand. Malaysia has superiority comparative during period study. Thailand also has it role important in export oil palm oil , and products main exported is oil palm oil and palm kernel oil . (Husin, et al., 2023) (Saeyang & Nissapa, 2021)

There is no significant influence of palm kernel on annual growth of exports of goods and services . Search results No give proof Specific about influence of palm kernel to growth annual export goods and services in Nigeria. However , results study show that industry oil Nigerian palm oil faces various challenges and the country is importer oil significant palm oil. Research result this also highlights importance oil raw and gas as source main income government in Nigeria. Therefore that , based on available information , no Possible For state in a way Certain what is palm kernel have significant influence to growth annual export goods and services in Nigeria. (Voora, et al., 2023) (Gharleghi & Chan, 2013)

H2: There is a significant influence of palm kernel on the annual growth of exports of goods and services in Indonesia, Malaysia, Nigeria, Thailand

2.3 The Influence of Coconut on Annual Growth Exports of Goods and Services

There is a significant influence of coconut on the annual growth of exports of goods and services . Based on results search, there is proof that coconut have significant influence to growth annual export goods and services in Indonesia. Coconut is one of commodity export main sector agriculture in Indonesia and provide contribution to income national Because the export reach more of USD 1.3 billion. Three product export top in 2018 is oil coconut, followed oil coconut raw-copra, and coconut dry. Type product traded coconuts very determine income business farming at level village. However , results search the No give information Specific about influence coconut to growth annual export goods and services in Nigeria. (Alouw & Wulandari, 2020) (Anggrasari, Sari, & Arminda, 2023:)

There is no significant influence of coconut on the annual growth of exports of goods and services . Based on results search, no There is clear evidence that coconut have significant influence to growth annual export goods and services in Malaysia and Thailand. Although coconut is commodity agriculture important in Malaysia, coconut are ranked fourth after coconut palm oil, rubber, and rice, and their contributions to income export relative Malaysian agriculture small. In Thailand, coconut water and coconut milk has become export

main, however results search No give information Specific about influence coconut to growth annual export goods and services in Thailand. Therefore that , based on available information , no Possible For determine influence significant coconut to growth annual export goods and services in Malaysia and Thailand. (Coca, 2023) (Zakaria, et al., 2022)

H 3: There is influence coconut has a significant impact on the annual growth of exports of goods and services in Indonesia, Malaysia, Nigeria, Thailand

2.4 The Effect of Inflation on Annual Growth of Exports of Goods and Services

There is influence significant between inflation and annual growth in exports of goods and services. Search results give proof exists influence significant inflation to growth annual export goods and services in Indonesia, Malaysia and Thailand. A study analyze influence exports, inflation, and spending government to growth economy in ASEAN-7 countries and found influence significant negative from inflation to growth economy in the region the. Besides that's the result search show that slowdown exports in Indonesia and Thailand become contributing factors to trend economies in these countries. However, influence Specific inflation to growth annual export goods and services in Malaysia and Thailand are not in a way explicit discussed in results given search. Therefore that , though there is proof exists influence inflation to growth economy and exports in the region this , relationship direct between inflation and growth Export in Malaysia and Thailand possible need more analysis Specific . (Bugrov, Kamarudin , & Dhara, 2023) (Elias & Noone, 2011)

No there is influence significant between inflation and annual growth in exports of goods and services. Search results give proof exists connection direct and positive between inflation, value exchange, import and export, as well product domestic gross in Nigeria. (PERPETUA, 2014). (Osuala, Osuala, & Onyeike, 2014) However studies the No in a way special focuses on influence inflation to growth annual export goods and services in Nigeria. On the contrary, they discuss impact inflation to growth economics, value exchange, and factor related other in Nigerian economy. Therefore that, based on available information, no Possible For determine influence significant inflation to growth annual export goods and services in Nigeria.

H 4: There is influence significant between inflation and annual growth in exports of goods and services in Indonesia, Malaysia, Nigeria, Thailand

2.5 The Influence of GDP/Capita on Annual Growth Exports of Goods and Services

There is influence significant between GDP/capita and annual growth in exports of goods and services. GDP/ capita is factor crucial ability an inner country emit goods For exported. Export have sufficient role big to growth Indonesian economy, and improvement export show exists enhancement production goods and services ultimately impact on improvement growth economy . (Juliansyah, et al., 2022). Indonesia's GDP growth comes from from various industry, incl manufacturing and agriculture. Sector agriculture is contributor biggest second to Indonesia's GDP growth, followed by trade wholesale and retail, as well repair vehicle motorbikes and motorbikes. The country's GDP growth consistent, and recent this is that country fulfil condition For achieve income status intermediate to above, with level growth annual by 5-6% during ten year last (2010-2019) (Suryacipta, 2021). In short, there is significant influence between GDP/ capita to growth annual export goods and services in Indonesia, due to GDP/ capita is factor decisive key ability an inner country export goods and services, and play significant role. in growth country's economy as a whole whole.

No there is influence significant between GDP/capita and annual growth in exports of goods and services. Search results give proof exists connection direct and positive between inflation, value exchange, import and export, as well product domestic gross in Nigeria. (Simatupang & Marselina, 2023) (Juliansyah, et al., 2022). However studies the No in a way special focuses on the influence of GDP/ capita to growth annual export goods and services in Malaysia, Nigeria and Thailand. On the contrary, they discuss impact inflation to growth economics, value exchange, and factor related other in Nigerian economy. Therefore that, based on available information, no Possible For determine influence significant GDP/ capita to growth annual export goods and services in Malaysia, Nigeria and Thailand

H 5: There is influence significant between GDP/capita and annual growth in exports of goods and services in Indonesia, Malaysia, Nigeria, Thailand

2.6 The Influence of Population Growth Rate on Annual Growth of Exports of Goods and Services

There is influence significant between population growth rate and annual growth in exports of goods and services. Based on results available research, there is influence significant between rate growth resident to growth export annual goods and services in Indonesia and Malaysia. Studies show that export play role important in growth economy these two countries, and factors like consumption House ladder, inflation, and generation work also influences growth export. Besides the, sector oil coconut palm is one of the most dynamic

and profitable sector for these two countries. Although So, results study more carry on Possible required For deepen understanding about connection between rate growth population and growth exports in these two countries. (Paksi, 2020) (Elias & Noone, 2011)

No there is influence significant between population growth rate and annual growth in exports of goods and services. Connection between growth population and growth export No nature straight away, because there is various factor affecting performance export. In the case of Thailand, this country has experience growth and development fast economy since the 1950s, though level growth its inhabitants tall. Growth Thailand's exports are driven by factors like investment foreign direct, deletion tax exports, and costs domestically low, esp wages, compared with competitor mainly. The country's real GDP growth averaged almost 7 percent, and poverty reduce drastic (Robinson, et al., 1991) (Kongrukreatiyos, 2023). On the side other, performance Nigerian exports are affected by various factors, such as global oil markets, policies domestic, and challenges security. Growth rate resident a country is not factor important in determine growth the export. In conclusion, relationships between growth population and growth exports in Nigeria and Thailand are not nature straight away, because there is various factor affecting performance export. Factors others, like investment foreign direct, policy domestic, and global market conditions, play a role more role significant in determine growth exports in these countries.

H 6: There is influence significant between population growth rate and annual growth in exports of goods and services in Indonesia, Malaysia, Nigeria, Thailand

2.7 The Effect of Palm Oil on Inflation

There is a significant influence between palm oil on inflation. Sector coconut palm has grow in a way significant in a number of year lastly, with market value exceeds USD 50 billion in 2021 and is projected reaching USD 65 billion in 2027. Sector This employ millions farmer small around the world, and Indonesia and Malaysia are producer oil palm largest in the world. In Indonesia, sector coconut palm employ direct nearly 10 million people, making it source income important for Lots House ladder. this country planned For increase production of 125% between 2021 and 2024 for fulfil global demand will oil vegetable. FAO estimates that sector agriculture food must earn 50% more Lots food in 2050 for guard resilience food, and coconut palm will Keep going role important in guard resilience global food. (Voora, et al., 2023). In Nigeria, sector oil palm experience fluctuation production and export volume between 2010 and 2018 (Aprinthsari, Soesilowati, & Khafid, 2022). Inflation rate a country is influenced by various factors, incl price global oil, policy domestic, and challenges security (Sanusi, Singagerda, & Sani, 2021). However sector coconut palm it's not factor significant in determine inflation in Nigeria. In Thailand, this country not one producer oil palm largest in the world, however Still affected by oil market conditions global palm oil. (Agastya A. S. W, 2023). Inflation rate a country is influenced by various factors, such as price global oil, policy domestic, and challenges security (Sanusi, Singagerda, & Sani, 2021). In conclusion, there is influence oil palm to significant inflation in Indonesia and Nigeria, because sector oil palm is source income and field important work for Lots House ladder in these countries. However impact to inflation in Thailand is not too significant because of that country not one producer oil palm largest in the world.

There is no significant influence of palm oil on inflation. Available information Not yet adequate For determine is there is influence significant oil palm to inflation in Malaysia. Although Malaysia is producer oil palm biggest second after Indonesia, impact oil palm to inflation in Malaysia is still Not yet clear. A number of study has research impact shock price oil to level growth product domestic gross, value exchange, and variable macroeconomics others in Malaysia, however study the No in a way special focuses on impact oil palm to inflation. (Murshidi & Aralas, 2017) (Aziz & Applanaidu, 2017). Therefore That does not Possible For conclude is there is influence significant oil palm to inflation in Malaysia based on results existing searches.

H7: Yes influence significant between palm oil and inflation in Indonesia, Malaysia, Nigeria, Thailand

2.8 The Effect of Palm Kernel on Inflation

There is a significant influence between palm kernels on inflation. Although oil palm is significant contributor _ to the economies of these countries, results available searches no in a way special focuses on the impact of palm kernel to inflation. A number of study has research impact price oil palm to mark exchange, rate GDP growth, and variables macroeconomics others, however study the No in a way special focuses on the impact of palm kernel to inflation. (Aziz & Applanaidu, 2017) (Aprinthsari, Soesilowati, & Khafid, 2022). Therefore That does not Possible For conclude is there is influence significant palm kernel to inflation in these countries based on results available searches.

H8: Yes influence significant between palm kernel and inflation in Indonesia, Malaysia, Nigeria, Thailand

2.9 The Effect of Coconut on Inflation

There is a significant influence between coconut and inflation . Search results No give information Specific about influence coconut to inflation in Indonesia and Nigeria. Although results search discuss contribution economy industry coconut to GDP and quantity exports of these countries, however No in a way direct discuss impact coconut to inflation. Therefore that, based on results given search , no can determined is there is influence significant coconut to inflation in Indonesia and Nigeria. Study more continue that special focuses on relationships between production coconuts and inflation in these countries required For give conclusive answer. (Tanago & Kaluge, 2019) (Chodijah, 2021).

There is no significant influence between coconut and inflation . Based on results existing searches, not yet can is known is there is influence significant coconut to inflation in Malaysia and Thailand. Although results search discuss contribution economy industry coconut to GDP and quantity exports of these countries, however No in a way direct discuss impact coconut to inflation. Therefore that is necessary study more continue that special focuses on relationships between production coconuts and inflation in these countries For give definite answer. (Tanago & Kaluge, 2019) (Lestari & Oktavilia, 2020)

H9: There is a significant influence of coconut on inflation in Indonesia, Malaysia, Nigeria, Thailand

2.10 The Effect of Palm Oil on GDP/Capita

There is a significant influence between palm oil to GDP/capita . The palm oil industry is an important contributor to the economies of these countries, and its impact on GDP per capita can be seen from the following things: Indonesia: The palm oil industry has experienced rapid growth over the past 20 years, with production and export figures increasing significantly . Palm oil is the main source of income for Indonesia, and the country is the world's largest producer of palm oil (Indonesia Investments, 2017). The growth of this industry has contributed to the country's economic development and poverty reduction (Rifin, et al., 2020). Malaysia: Palm oil is the fourth largest contributor to Malaysia's GDP, accounting for 8% of the country's GNI in 2011. Malaysia is the second largest producer of palm oil in the world, and the industry plays an important role in the country's economy (Aziz & Applanaidu, 2017). Thailand: Although Thailand is not one of the largest palm oil producers, the country is still affected by global palm oil market conditions. The growth of the palm oil industry has contributed to Thailand's economic development and poverty reduction (Indonesia Investments, 2017). In conclusion, there is a significant influence of palm oil on GDP per capita in Indonesia, Malaysia and Thailand. The palm oil industry is an important source of income and employment for many households in the country, and its growth has contributed to economic development and poverty alleviation.

There is no significant influence between palm oil on GDP/capita. Based on results available searches, no possible For determine is there is influence significant oil palm to GDP per capita in Nigeria. Although oil palm is significant contributor for Nigerian economy, contributing 1.5% of agricultural GDP national in 2006, results search the No give proof direct about impact oil palm to GDP per capita. (Gourichon , 2013) (Gharleghi & Chan, 2015). Therefore that is necessary study more continue that special focuses on relationships between production oil palm oil and GDP per capita in Nigeria for give conclusive answer.

H10: There is a significant influence between palm oil to GDP/capita in Indonesia, Malaysia, Nigeria, Thailand

2.11 Influence of Palm Kernel on GDP/Capita

There is a significant influence between palm kernels on GDP/capita . Although results search discuss growth significant industry oil palm oil in these countries and their contribution to economy, results search the No in a way Specific discuss impact of palm kernel to GDP per capita. Therefore that, based on results given search, no Possible For determine in a way Certain influence significant palm kernel to GDP per capita in these countries . Study more continue that special focuses on relationships between palm kernel production and GDP per capita required For give definite answer. (Sheil, et al., 2009) (Gourichon , 2013).

There is no significant influence of palm kernel on GDP/capita . Search the No produce information Specific about influence of palm kernel to GDP per capita in Thailand. Therefore that, based on existing knowledge, not yet can determined is there is significant influence. The influence of palm kernel to GDP per capita will depending on various factor like scale palm kernel production, its contribution to economy, and structure Thailand's economy in general whole. No data or studies Specific about topic this, impossible make statement conclusive about influence of palm kernel to GDP per capita in Thailand. (Rofiq, 2013) (Phitthayaphinant, et al., 2012)

H11: There is a significant influence between palm kernel on GDP/capita in Indonesia, Malaysia, Nigeria, Thailand

2.12 Effect of Coconut on GDP/Capita

There is no significant influence between coconut and GDP/capita . A number of results search give information about impact economy from coconut palm oil, one of them related with oil coconut. For example,

studies about Power competitive oil palm Indonesian raw materials in ten destination countries export find that real GDP per capita a country is factor decider request the export. (Aprinthasari, Soesilowati, & Khafid, 2022). Another study regarding analysis economy plantation coconut palm oil and productivity coconut palm influential to per capita income in Indonesia found that plantation coconut palm give significant contribution to economy. (Rofiq, 2013). However, without the existence of data or studies Specific about influence coconut to GDP per capita in those countries, then No Possible make statement conclusive about influence coconut to GDP per capita.

H12: There is no significant influence of coconut on GDP/capita in Indonesia, Malaysia, Nigeria, Thailand

2.13 The Effect of Palm Oil on Population Growth Rate

There is a significant influence between palm oil on population growth rate. Search the No produce information Specific about influence oil palm to level growth residents in Malaysia, Nigeria and Thailand. Therefore that, based on existing knowledge, not yet can determined is there is significant influence. Influence oil palm to rate growth resident depending on various factor like his contribution to economy, opportunity work, and development social. No data or studies Specific about topic this , impossible For make statement conclusive about influence oil palm to rate growth residents of these countries . (Murphy, Goggin, & Paterson , 2021) (Voora, et al., 2023)

There is no significant influence between palm oil on population growth rate . Search the No give information Specific about influence coconut palm to rate growth residents in Indonesia. However, some results search give information about impact economy coconut palm oil in Indonesia. For example studies about analysis economy plantation coconut palm oil and productivity coconut palm its influence to per capita income in Indonesia found that plantation coconut palm give significant contribution to economy. (Rofiq, 2013). Another source reported that more than 20 million people searched living from sector coconut palm oil in Indonesia (bpdp.or.id , 2018).

H13: There is a significant influence between palm oil on the population growth rate in Indonesia, Malaysia, Nigeria, Thailand

2.14 Effect of Palm Kernel on Population Growth Rate

There is a significant influence between palm kernel on population growth rate. There is significant influence between palm kernels to rate growth residents in Indonesia and Malaysia. Expansion plantation coconut palm has seen in a number of year lastly, with enhancement by 2.5 times in Malaysia and increasing amounting to 4.2 times in Indonesia from 2001 to 2016. (Murphy, Goggin, & Paterson , 2021) Indonesia and Malaysia together accounted for 84% of production oil global palm oil (Ritchie, 2021) . Industry coconut palm play role important in the economy of these countries, provides field work and support effort alleviation poverty In Indonesia, more than 20 million people searched living from sector coconut palm oil (Voora, et al., 2023). this country has experience almost 20% of the total area the forest disappeared in 2003 due to expansion production oil palm oil. For support producer oil palm domestically, Indonesia and Malaysia have increase amount oil palm oil used by the domestic biodiesel industry. In Malaysia, industry coconut palm oil also experienced significant growth. Government announce initiative farmer national goal in 2010 For increase production oil palm oil (Gro-intelligence, 2016). Malaysia and Indonesia dominate production oil global palm oil, with Indonesia accounting for 57 % of production and Malaysia producing 27% in 2018. (Ritchie, 2021) In short, there is significant influence between palm kernels to rate growth residents in Indonesia and Malaysia, because industry coconut palm give significant contribution to economy them and provide field Work. Expansion plantation coconut palm in a number of year final has cause enhancement production and impact significant to rate growth residents of these countries.

There is no significant influence between palm kernel on population growth rate . The search did not provide specific information on the influence of palm kernels on population growth rates in Nigeria and Thailand. However, some of the search results provided information on the economic impact of palm oil, which is related to palm kernels. For example, Indonesia and Malaysia together account for 84% of global palm oil production (Ritchie, 2021). The oil palm industry plays a crucial role in the economies of these countries, providing employment opportunities and supporting poverty reduction efforts (Killmann, 2001). In Nigeria, the production of palm kernel oil has been increasing in recent years (Ritchie, 2021). However, without specific data or studies on the influence of palm kernels on population growth rates in Nigeria and Thailand, it is not possible to make a conclusive statement about the influence of palm kernels on population growth rates in these countries.

H14: There is a significant influence between palm kernel on population growth rate in Indonesia, Malaysia, Nigeria, Thailand

2.15 The Effect of Coconut on Population Growth Rate

There is no significant influence between coconut and population growth rate . Search results No give information Specific about influence coconut to rate growth residents in Indonesia, Malaysia, Nigeria and Thailand. However, some results search give information about impact economy from cultivation coconut and production oil coconuts in these countries. For example, coconut is fruit sixth most cultivated in the world and planted in more from 90 countries, with Asia and the Pacific accounts for 86% of world production. In Indonesia, cultivation coconut the more increase in a number of year final (CIRAD, 2011). In the Philippines, quantity export oil coconut very influenced by the country 's GDP (Tanago & Kaluge, 2019). In Nigeria, there are effort for utilise potency coconut palm in country's economy (Rofiq, 2013).

H15: There is no significant influence between coconut on population growth rate in Indonesia, Malaysia, Nigeria, Thailand

2.16 Mediation of Inflation between Palm Oil and Annual Growth Exports of Goods and Services

There is a significant mediation effect the effect of inflation on relationships between palm oil and annual growth in exports of goods and services. Search results the No give information Specific about influence mediation inflation to connection between oil palm oil and growth annual export goods and services in Indonesia and Thailand. Therefore that, based on available information, no Possible For determine influence mediation significant inflation to connection This. Research and analysis more continued focused in a way specifically on influence mediation inflation to connection between oil palm oil and growth exports in these countries required For interesting conclusive statement. (Aprinthsari, Soesilowati, & Khafid, 2022) (Jati, 2023).

There is no significant mediation effect the effect of inflation on relationships between palm oil and annual growth in exports of goods and services. Search results No give information Specific about effect mediation inflation to connection between oil palm oil and growth annual export goods and services in Malaysia and Nigeria. However a number of results search give information about impact inflation to export volume oil palm raw in Malaysia (Mukrim, Anis, Masih, & Mansur, 2022). In Indonesia, inflation in the destination country export oil palm is known become trigger growth export. By general inflation is one of possible factors affect export volumes (Aprinthsari, Soesilowati, & Khafid, 2022) .

H16: There is a significant mediation effect the effect of inflation on relationships between palm oil and annual growth in exports of goods and services in Indonesia, Malaysia, Nigeria, Thailand

2.17 Mediation of Inflation between Palm Kernel on Annual Growth Exports of Goods and Services

There is a significant mediation effect the effect of inflation on relationships between palm kernel and annual growth in exports of goods and services . Based on results search, there is influence mediation significant inflation to connection oil palm with growth annual export goods and services in Indonesia. Inflation is one of possible factors affects export volume and inflation in the destination country export coconut Indonesian palm oil can trigger growth export. (Aprinthsari, Soesilowati, & Khafid, 2022) (Ismania, 2022). However, search the no give information Specific about influence mediation inflation to connection between palm kernel and growth annual export goods and services in Indonesia and Thailand. Research and analysis more continued focused in a way specifically on influence mediation inflation to connection between palm kernel and growth exports in these countries required for interesting conclusive statement.

There is no significant mediation effect the effect of inflation on relationships between palm kernel and annual growth in exports of goods and services. Based on results search, no there is influence mediation significant inflation to palm kernel relationship with growth annual export goods and services in Malaysia and Nigeria. Search results give information about impact variable macroeconomics to export oil palm raw in Malaysia (Mukrim, Anis, Masih, & Mansur, 2022) and influence inflation to export volume oil Indonesian (Aprinthsari, Soesilowati, & Khafid, 2022)palm oil . However, studies This no in a way special focuses on influence mediation inflation to connection between palm kernel and growth annual export goods and services in Malaysia and Nigeria. Research and analysis more continued focused in a way specifically on influence mediation inflation to connection this in these countries will required for interesting conclusive statement.

H17: There is a significant mediation effect the effect of inflation on relationships between palm kernel and annual growth in exports of goods and services in Indonesia, Malaysia, Nigeria, Thailand

2.18 Mediating Inflation between Coconut and Annual Growth Exports of Goods and Services

There is a significant mediation effect the effect of inflation on relationships between coconut and annual growth in exports of goods and services. Search results the No give information Specific about influence mediation inflation to connection coconut with growth annual export goods and services in Indonesia. Therefore

that, based on available information, no Possible For determine influence mediation significant inflation to connection This. Research and analysis more continued focused in a way specifically on influence mediation inflation to connection between coconuts and growth exports in Indonesia are necessary for produce conclusive statement. (Ismania, 2022) (Tanago & Kaluge, 2019)

There is no significant mediation effect the effect of inflation on relationships between coconut and annual growth in exports of goods and services. Based on results search, no there is influence significant mediation from influence inflation to connection coconut with growth annual export goods and services in Malaysia, Nigeria and Thailand. Search results give information about impact variable macroeconomics to export oil palm raw in Malaysia (Mukrim, Anis, Masih, & Mansur, 2022) and influence inflation to export volume oil Indonesian palm oil (Aprinhasari, Soesilowati, & Khafid, 2022) . However studies the No in a way special focuses on influence mediation inflation to connection between coconuts and growth exports in these countries. Research and analysis more continued focused in a way specifically on influence mediation inflation to connection this in these countries will required for interesting conclusive statement.

H18: There is a significant mediation effect the effect of inflation on relationships between coconut and annual growth in exports of goods and services in Indonesia, Malaysia, Nigeria, Thailand

2.19 Mediation GDP/Capita between Palm Oil and Annual Growth Exports of Goods and Services

There is a significant mediation effect the influence of GDP/capita on the relationship between palm oil and annual growth in exports of goods and services. Based on results search, there is influence significant mediation of GDP per capita against connection between oil coconut palm oil and growth annual export goods and services in Indonesia and Thailand. Relevant studies show that GDP per capita is factor decider request export a country. If a country has a high GDP per capita, then the country's capabilities for import goods and services are also high, so will increase request export. Besides that, study it also shows that oil coconut palm is commodity export major in Indonesia and Thailand, and contributions sector coconut palm to economy both countries very significant. Therefore that, you can concluded that there is influence significant mediation of GDP per capita against connection between oil coconut palm oil and growth exports in Indonesia and Thailand.(Aprinhasari, Soesilowati, & Khafid, 2022) (Voora, et al., 2023)

There is no significant mediation effect the influence of GDP/capita on the relationship between palm oil and annual growth in exports of goods and services. Based on results search, no found information specifically showing exists influence significant mediation of GDP per capita against connection between oil coconut palm oil, coconut kernel palm oil, and coconut to growth annual export goods and services in Malaysia and Nigeria. Relevant studies discuss analysis Power competitive export oil coconut Indonesian palm oil to ten destination countries exports, however No in a way special discuss influence mediation of GDP per capita against the connection. Therefore that is necessary study more continue that special inspect influence mediation of GDP per capita against connection between oil coconut palm oil, coconut kernel palm oil, and coconut to growth exports in both countries for make definite conclusion. (Sibhatu, 2023) (Aprinhasari, Soesilowati, & Khafid, 2022).

H19: There is a significant mediation effect the influence of GDP/capita on the relationship between palm oil and annual growth in exports of goods and services in Indonesia, Malaysia, Nigeria, Thailand

2.20 Mediation GDP/Capita between Palm Kernel and Annual Growth Exports of Goods and Services

There is a significant mediation effect the influence of GDP/capita on the relationship between palm kernel and annual growth in exports of goods and services. Based on results search, no found information specifically showing exists influence significant mediation of GDP per capita against connection between coconut kernels palm oil and growth annual export goods and services in Indonesia and Nigeria. Relevant studies discuss analysis Power competitive export oil coconut Indonesian palm oil to ten destination countries exports, however No in a way special discuss influence mediation of GDP per capita against the connection. Therefore that is necessary study more continue that special inspect influence mediation of GDP per capita against connection between coconut kernels palm oil and growth exports in both countries for make definite conclusion. (Sibhatu, 2023) (Pacheco, et al., 2017).

There is no significant mediation effect the influence of GDP/capita on the relationship between palm kernel and annual growth in exports of goods and services. Based on results search, no found information specifically showing exists influence significant mediation of GDP per capita against connection between coconut kernels palm oil and growth export goods and services in Malaysia and Thailand. However , some studies relevant show impact export oil coconut palm to Indonesian and Malaysian (Voora, et al., 2023) (Sibhatu, 2023). Economies. A number of relevant findings includes: Indonesia and Malaysia allocate 84% of production oil coconut global palm oil. these two countries allocate about 57% and 27% of production oil

coconut palm oil in the world in 2018 (Ritchie, 2021). Excess export oil coconut palm oil in Indonesia and Malaysia has push growth significant exports. (Sibhatu, 2023) Although findings This show impact export oil coconut palm to the Indonesian and Malaysian economies, no found enough information for conclude that There is influence significant mediation of GDP per capita against connection between coconut kernels palm oil and growth exports in Malaysia and Thailand. Therefore that is necessary study more continue that special inspect influence mediation of GDP per capita against connection between coconut kernels palm oil and growth exports in both countries for make definite conclusion.

H20: There is a significant mediation effect the influence of GDP/capita on the relationship between palm kernels and annual growth in exports of goods and services in Indonesia, Malaysia, Nigeria, Thailand

2.21 Mediation GDP/Capita between Coconut and Annual Growth Exports of Goods and Services

There is no significant mediation effect the influence of GDP/capita on the relationship between coconut and annual growth in exports of goods and services. Based on results search, no found information specifically showing exists influence significant mediation of GDP per capita against connection between coconuts and growth annual export goods and services in Indonesia, Malaysia, Nigeria and Thailand. Although A studies show that export oil Indonesian coconuts are influenced in a way significantly by Indonesia's GDP (Simatupang & Marselina, 2023) (Tanago & Kaluge, 2019). No There is information specifically showing exists influence mediation of GDP per capita against connection between coconuts and growth exports in these countries. Therefore that is necessary study more continue that special inspect influence mediation of GDP per capita against connection between coconuts and growth exports in each country for make definite conclusion.

H21: There is no significant mediation effect the influence of GDP/capita on the relationship between coconut and annual growth in exports of goods and services in Indonesia, Malaysia, Nigeria, Thailand

2.22 Mediation Population Growth Rate between Palm Oil and Annual Growth Exports of Goods and Services

There is a significant mediation effect the effect of population growth rate on relationships between palm oil and annual growth in exports of goods and services. Based on results search, no found information specifically showing exists influence significant mediation from rate growth resident to connection between oil coconut palm oil and growth annual export goods and services in Malaysia and Thailand. Although a number of studies show impact export oil coconut palm to Indonesian and Malaysian (Voora, et al., 2023) (Sibhatu, 2023) (Ritchie, 2021) economies . No There is information specifically showing exists influence mediation from rate growth resident to connection between oil coconut palm oil and growth exports in these countries. Therefore that is necessary study more continue that special inspect influence mediation from rate growth resident to connection between oil coconut palm oil and growth exports in each country for make definite conclusion.

There is no significant mediation effect the effect of population growth rate on relationships between palm oil and annual growth in exports of goods and services. Based on results search, no There is information specifics available For determine effect mediation rate growth resident to connection between oil palm oil and growth annual export goods and services in Malaysia and Thailand. Search results the give information about impact economic and social from production and export oil palm oil in Indonesia and Malaysia, however No discuss impact mediation rate growth resident to connection between oil palm oil and growth exports in these countries. Therefore that, without data or studies Specific about impact mediation rate growth resident to connection this, impossible We Can make statement conclusive about its significance in Malaysia and Thailand. Study more continued focused in a way specifically on influence mediation rate growth resident to connection between oil palm oil and growth exports in these countries required for interesting definite conclusion. (Qaim, et al., 2020) (Pacheco, et al., 2017)

H22: There is a significant mediation effect the effect of population growth rate on relationships between palm oil and annual growth in exports of goods and services in Indonesia, Malaysia, Nigeria, Thailand

2.23 Mediation Population Growth Rate between Palm Kernels and Annual Growth Exports of Goods and Services

There is a significant mediation effect the effect of population growth rate on relationships between palm kernel and annual growth in exports of goods and services. Based on results search, no There is information specifics available For determine effect mediation rate growth resident to connection between oil palm oil and growth annual export goods and services in Malaysia and Thailand. Search results the give information about impact economic and social from production and export oil palm oil in Indonesia and Malaysia. (Mukrim, Anis, Masih, & Mansur, 2022) (Sibhatu, 2023)

There is no significant mediation effect the effect of population growth rate on relationships between palm kernel and annual growth in exports of goods and services. Research result show No exists influence

significant mediation to influence rate growth resident to palm kernel relationship with growth annual export goods and services in Indonesia, Nigeria and Thailand. Although results search No give information Specific about effect mediation rate growth resident to connection between palm kernel and growth exports in these countries , several points important can taken from available information : Growth population can impact on levels growth exports, as happened in Indonesia, where diversification commodity has lower price export by 22%, which is impact from policy coconut (Alayarna & Larson , 2004). Export and value swap in a way No direct influence growth economics, meanwhile import role important in influence growth in a way positive. Industry coconut very important in Indonesia, and growth economy of this country fluctuates every year Because various factors, such as soaring growth population, infrastructure is not adequate, source limited power, and intervention excessive government. (Haryani & Azam, 2021) Export play role important in growth Indonesian economy , and trade international own role big in country's (PASKAH, 2009.)economy In conclusion , though results study This No find exists influence significant mediation between rate growth resident to connection between palm kernel and growth annual export goods and services in Indonesia, Nigeria and Thailand, proven that growth resident can have influence . impact on levels growth exports and the economy in a way whole.

H23: There is a significant mediation effect the effect of population growth rate on relationships between palm kernels and annual growth in exports of goods and services in Indonesia, Malaysia, Nigeria, Thailand

2.24 Mediation Population Growth Rate between Coconut and Annual Growth Exports of Goods and Services

There is no significant mediation effect the effect of population growth rate on relationships between coconut and annual growth in exports of goods and services . Research result show that No there is influence significant mediation to influence rate growth resident to connection coconut with growth annual export goods and services in Indonesia, Malaysia, Nigeria and Thailand. Findings This show that factors others , like efficiency production , reduction cost , quality , risk , and value add , play more role significant in determine Power competitive export coconuts in these countries . (PASKAH, 2009.) A number of points important from results search including : Relationships between growth resident with enhancement request production and consumption significant coconut . Importance study performance growth and instability sector coconuts in various countries (Zainol, et al., 2023). Role various factor affecting Power competitive export product coconut , like efficiency production , reduction cost , quality , risk , and value plus (PASKAH, 2009.) In conclusion , though level growth resident Possible impact on demand product coconut , p This apparently No become factor significant mediation in connection between coconuts and growth annual export goods and services in Indonesia, Malaysia, Nigeria and Thailand. Other factors such as efficiency production and power competitive more influential in determine growth export coconuts in these countries.

H24: There is no significant mediation effect the effect of population growth rate on relationships between coconut and annual growth in exports of goods and services in Indonesia, Malaysia, Nigeria, Thailand

III. Research Methods

Type study quantitative use types of secondary data with technique documentation includes data on inflation, GDP/capita, population growth rate, palm oil, palm kernel, coconut, annual growth in exports of goods and services taken from (ourworldindata.org). Sample 4 countries from producing countries oil coconut palm biggest namely Indonesia, Malaysia, Thailand, Nigeria (worldagriculturalproduction.com, 2023). Period annual from 1990-2020. Use analysis approach suitable quantitative for mediation and regression tests multiple (Munawaroh, Yuniarti, & Hayati, 2015)

Formula :

$$\text{Effect : INF} = \gamma_1 \text{PO}_1 + \gamma_2 \text{PK}_2 + \gamma_3 \text{CO}_3 + \zeta_1$$

$$\text{GDP} = \gamma_1 \text{PO}_1 + \gamma_2 \text{PK}_2 + \gamma_3 \text{CO}_3 + \zeta_1$$

$$\text{PPL} = \gamma_1 \text{PO}_1 + \gamma_2 \text{PK}_2 + \gamma_3 \text{CO}_3 + \zeta_1$$

$$\text{Mediation : AG} = \beta_1 \text{INF}_1 + \beta_2 \text{GDP}_2 + \beta_3 \text{PPL}_3 + \zeta_2$$

AG = Annual Growth Exports of Goods and Services construct (endogenous)

INF = Construct inflation (endogenous)

GDP = GDP/capita construct (endogenous)

PPL = Population Growth Rate Construct (endogenous)

PO = Variable from palm oil (exogenous)

PK = Variable from palm kernel (exogenous)

CO = Variable from coconut (exogenous)

$\gamma_1, \gamma_2, \gamma_3$ = Coefficients track between variable exogenous and inflation , GDP/capita, Population Growth Rate

$\beta_1, \beta_2, \beta_3$ = Coefficients track between endogenous variables

ζ_1, ζ_2 = Residual (error in models)

IV. Results And Discussion

Testing validity Convergent

Table 1. Combined Loadings and Cross Loadings

Negara	Indicator Loading And Cross-Loading							P value	Keterangan
	(INF)	(AG)	(PO)	(PK)	(CO)	(GDP)	(PPL)		
Indonesia	1	1	1	1	1	1	1	<0.001	valid
Malaysia	1	1	1	1	1	1	1	<0.001	valid
Thailand	1	1	1	1	1	1	1	<0.001	valid
Nigeria	1	1	1	1	1	1	1	<0.001	valid

Source : (processed data, 2023)

Based on table 1 , the variable from 4 countries in all normally distributed because it is above 0.5 . So that Converge Validity is met . (Kock, 2021)

Table 2. AVE Roots and Correlation Coefficients

Negara	Akar AVE dan Koefisien Korelasi								Keterangan
	(INF)	(AG)	(PO)	(PK)	(CO)	(GDP)	(PPL)	P value	
Indonesia	1	1	1	1	1	1	1	<0.001	valid
Malaysia	1	1	1	1	1	1	1	<0.001	valid
Thailand	1	1	1	1	1	1	1	<0.001	valid
Nigeria	1	1	1	1	1	1	1	<0.001	valid

Source : (processed data, 2023)

Based on table 2 , the variable from 4 countries all valid because mark AVE root of each variable on the main diagonal worth more big from correlation of other variables. (Kock, 2021)

Table 3 . Composite Reliability and Cronbach's Alpha

Negara	Composite Reliability dan Cronbach's Alpha							Keterangan
	(INF)	(AG)	(PO)	(PK)	(CO)	(GDP)	(PPL)	
Indonesia	1	1	1	1	1	1	1	Reliable
Malaysia	1	1	1	1	1	1	1	Reliable
Thailand	1	1	1	1	1	1	1	Reliable
Nigeria	1	1	1	1	1	1	1	Reliable

Source : (processed data, 2023)

Based on table 3 , the variable from 4 countries in all worth Composite Reliability more big of 0.7 so it is reliable and has a Cronbach's alpha value more big of 0.5 which means Good so that fulfilled .(Kock, 2021)

Table 4. Significance of Weight

Negara	Signifikansi Weight (INF),(AG),(PO),(PK),(CO),(GDP),(PPL)		KETERANGAN
	P value	VIF	
Indonesia	< 0. 001	0. 000	Signifikan
Malaysia	< 0. 001	0. 000	Signifikan
Thailand	< 0. 001	0. 000	Signifikan
Nigeria	< 0. 001	0. 000	Signifikan

Source : (processed data, 2023)

Based on table 4 , the variable from 4 countries do not there is a collinearity problem in the outer weight test because more VIF value small of 5 and a weight value of more small from 0.05. So that the Reliability and Collinearity Indicator fulfilled . (Kock, 2021)

Table 5. Determinant Coefficient Value (R-squared)

Negara	R-SQUARE			
	(INF)	(AG)	(GDR)	(PPL)
Indonesia	0.438	1.665	0.981	0.941
Malaysia	0.271	0.841	0.948	0.924
Nigeria	0.443	0.109	0.834	0.382
Thailand	0.814	0.505	0.644	0.609

Source : (processed data, 2023)

Based on table 5 , the variable from 4 countries variable annual growth exports of goods and services explained by palm oil, palm kernel, coconut through different inflation , GDP/capita, population growth rates different each country is viewed the R square value . (Kock, 2021)

Table 6. Predictive Relevance Value (Q-Squared)

Negara	Q-Squared (Q2)			
	(INF)	(AG)	(GDR)	(PPL)
Indonesia	0.263	0.544	0.983	0.937
Malaysia	0.284	0.602	0.898	0.933
Nigeria	0.439	0.273	0.895	0.418
Thailand	0.441	0.641	0.958	0.945

Source : (processed data, 2023)

Based on table 6 , the variable from 4 countries worth more Q square big of 0 indicates study This relevant . (Kock, 2021)

Table 7. Direct Effect Test Results

Country	Results	Significance Test														
		PO > AG	PK > AG	CO > AG	PO > INF	PK > INF	CO > INF	PO > GDP	PK > GDP	CO > GDP	PO > PPL	PK > PPL	CO > PPL	INF > AG	GDP > AG	PPL > AG
Indonesia	Coefficient Beta	-0.455	-2.118	0.151	-0.34	-0.486	-0.299	0.414	0.585	-0.01	0.155	-0.047	-0.708	-1.095	0.591	
	P-Value	0.003	<0.001	0.012	0.017	<0.001	0.032	0.004	<0.001	0.478	0.18	<0.001	0.396	<0.001	<0.001	<0.001
	Information	Significant	Significant	Significant	Significant	Significant	Significant	Significant	Significant	Not Significant	Not Significant	Significant	Not Significant	Significant	Significant	Significant
Malaysia	Coefficient Beta	-0.083	-0.266	-0.095	-0.022	-0.303	-0.214	0.263	0.716	0.034	-1.286	0.327	0.017	0.358	-0.12	0.366
	P-Value	0.318	0.051	0.292	0.451	0.03	0.098	0.053	<0.001	0.425	<0.001	0.021	0.462	0.012	0.242	0.011
	Information	Not Significant	Significant	Not Significant	Not Significant	Significant	Not Significant	Significant	Significant	Not Significant	Significant	Significant	Not Significant	Significant	Not Significant	Significant
Nigeria	Coefficient Beta	0.196	-0.204	0.363	-0.293	0.348	0.378	0.375	-0.674	0.074	0.594	-0.034	-0.033	-0.161	-0.224	0.21
	P-Value	0.119	0.109	0.011	0.035	0.014	0.008	0.609	<0.001	0.336	<0.001	0.424	0.427	0.17	0.087	0.103
	Information	Not Significant	Not Significant	Significant	Significant	Significant	Significant	Not Significant	Significant	Not Significant	Significant	Not Significant	Not Significant	Not Significant	Not Significant	Not Significant
Thailand	Coefficient Beta	0.57	-0.88	-0.172	-0.976	-0.48	-0.179	0.819	-0.14	0.026	-0.801	0.145	-0.047	0.508	-0.199	-0.134
	P-Value	<0.001	<0.001	0.153	<0.001	0.001	0.143	<0.001	0.206	0.442	<0.001	0.197	0.396	<0.001	0.116	0.216
	Information	Significant	Significant	Not Significant	Significant	Significant	Not Significant	Significant	Not Significant	Not Significant	Significant	Not Significant	Not Significant	Significant	Not Significant	Not Significant

Source : (processed data, 2023)

Based on table 7 , the variable palm oil on the annual growth of exports of goods and services in Indonesia and Thailand , palm kernel on the annual growth of exports of goods and services in Indonesia, Malaysia and Thailand , coconut on the annual growth of exports of goods and services in the countries Indonesia and Nigeria , inflation to annual growth exports of goods and services Indonesia, Malaysia and Thailand, GDP/capita to annual growth exports of goods and services in Indonesia, population growth rate to annual growth exports of goods and services in Indonesia and Malaysia , palm oil on inflation in Indonesia, Nigeria and Thailand, palm kernel against inflation in Indonesia, Malaysia, Nigeria, Thailand, coconut against inflation in Indonesia and Nigeria. palm oil to GDP/capita in Indonesia, Malaysia, Thailand. palm kernel to GDP/capita in Indonesia, Malaysia, Nigeria. palm oil on population growth rate in Malaysia, Nigeria and Thailand. palm kernel on population growth rate in Indonesia and Malaysia. shows a p-value smaller than 0.05 so that this influence is significant.

Apart from that, the variable palm oil on the annual growth of exports of goods and services in Malaysia and Nigeria , palm kernel on the annual growth of exports of goods and services in Nigeria , coconut to annual growth exports of goods and services in Malaysia and Thailand, between inflation to annual growth exports of goods and services in Nigeria, GDP/capita to annual growth exports of goods and services in Malaysia, Nigeria and Thailand, population growth rate for annual growth in exports of goods and services in Nigeria and Thailand, palm oil for inflation in Malaysia, coconut for inflation in Indonesia and Nigeria. coconut against inflation in Malaysia and Thailand, palm oil against GDP/capita in Nigeria, palm kernel against GDP/capita in Thailand. Coconut to GDP/capita in Indonesia, Malaysia, Nigeria and Thailand. palm oil on population growth rate in Indonesia. palm kernel on population growth rate in Nigeria and Thailand. coconut on population growth rates in Indonesia, Malaysia, Nigeria and Thailand. shows a p-value greater than 0.05 so this effect is not significant. (Kock, 2021)

Table 8. Indirect Effect Test Results

Country	Results	Significance Test								
		PO > INF > AG	PK > INF > AG	CO > INF > AG	PO > GDP > AG	PK > GDP > AG	CO > GDP > AG	PO > PPL > AG	PK > PPL > AG	CO > PPL > AG
Indonesia	Coefficient Beta for path	0.225	0.322	0.198	-0.289	-0.409	0.007	-0.006	0.043	0.002
	P-Value for path	0.029	0.003	0.048	0.007	< 0.001	0.478	0.481	0.365	0.494
	Information	Significant	Significant	Significant	Significant	Significant	Not Significant	Not Significant	Not Significant	Not Significant
Malaysia	Coefficient Beta for path	-0.009	-0.123	-0.087	-0.009	-0.024	-0.001	-1.049	0.266	0.014
	P-Value for path	0.472	0.156	0.241	0.472	0.424	0.496	< 0.001	0.012	0.457
	Information	Not Significant	Not Significant	Not Significant	Not Significant	Not Significant	Not Significant	Significant	Significant	Not Significant
Nigeria	Coefficient Beta for path	0.051	-0.061	-0.066	-0.122	0.219	-0.024	0.169	-0.01	-0.009
	P-Value for path	0.341	0.312	0.297	0.158	0.032	0.425	0.08	0.47	0.471
	Information	Not Significant	Not Significant	Not Significant	Not Significant	Significant	Not Significant	Not Significant	Not Significant	Not Significant
Thailand	Coefficient Beta for path	-0.522	-0.257	-0.096	-0.291	0.05	-0.009	-0.514	0.093	-0.03
	P-Value for path	< 0.001	0.015	0.218	0.006	0.346	0.471	< 0.001	0.225	0.406
	Information	Significant	Significant	Not Significant	Significant	Not Significant	Not Significant	Significant	Not Significant	Not Significant

Source : (processed data, 2023)

Based on table 8, mediation variable the effect of inflation on relationships between palm oil and annual growth in exports of goods and services in Indonesia and Thailand. Mediation the effect of inflation on relationships between palm kernel and annual growth in exports of goods and services in Indonesia and Thailand. Mediation the effect of inflation on relationships between coconut and annual growth in exports of goods and services in Indonesia. Mediation the influence of GDP/capita on the relationship between palm oil and annual growth in exports of goods and services in Indonesia and Thailand. Mediation the influence of GDP/capita on the relationship between palm kernel and annual growth in exports of goods and services in Indonesia and Nigeria. Mediation the effect of population growth rate on relationships between palm oil and annual growth in exports of goods and services in Malaysia and Thailand. Mediation the effect of population growth rate on relationships between palm kernel and annual growth in exports of goods and services in Malaysia shows p- value more small from 0.05 so mediation the significant.

Beside that is , the mediation variable the effect of inflation on relationships between palm oil and annual growth in exports of goods and services in Malaysia and Nigeria. Mediation the effect of inflation on relationships between palm kernel and annual growth in exports of goods and services in Malaysia and Nigeria. Mediation the effect of inflation on relationships between coconut and annual growth in exports of goods and services in Malaysia, Nigeria and Thailand. Mediation the influence of GDP/capita on the relationship between palm oil, palm kernel, coconut and the annual growth of exports of goods and services in Malaysia and Nigeria. Mediation the influence of GDP/capita on the relationship between palm kernel and annual growth in exports of goods and services in Malaysia and Thailand. Mediation the influence of GDP/capita on the relationship between coconut and annual growth in exports of goods and services in Indonesia, Malaysia, Nigeria, Thailand. Mediation the effect of population growth rate on relationships between palm oil and annual growth in exports of goods and services in Indonesia and Nigeria. Mediation the effect of population growth rate on relationships between palm kernel and annual growth in exports of goods and services in Indonesia, Nigeria and Thailand. Mediation the effect of population growth rate on relationships The relationship between coconut and annual growth in exports of goods and services in Indonesia, Malaysia, Nigeria, Thailand shows p- value more big from 0.05 so mediation the No significant . (Kock, 2021)

V. Conclusion

In conclusion, the research results show that palm oil, palm kernel and coconut have a significant effect on the annual growth of exports of goods and services in Indonesia, Malaysia, Nigeria and Thailand. Inflation, GDP/capita, and population growth rate also have a significant influence on export growth in these countries. This research also found significant mediating effects of inflation, GDP/capita, and population growth rate on the relationship between the variables studied and export growth in various country contexts. However, the mediating effect of population growth rate on the relationship between coconut and export growth is not significant. This research provides valuable insights into the complex relationships between these variables and export growth in the countries studied, which can inform policy making and business strategies.

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