



Global Value Chains Promoting Economic Integration in Asia-Pacific: Insights from a Systematic Literature Review

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Abstract

Economic integration, encompassing the removal or reduction of trade barriers and the coordination of monetary and fiscal policies, plays a pivotal role in promoting cooperation among nations. This systematic literature review examines the role of global value chains (GVCs) in promoting economic integration, with a specific focus on the Asia-Pacific region. Utilizing the PRISMA methodology, 3028 research papers on economic integration and GVCs were analysed. The study aims to investigate the significance of GVCs in driving economic integration, explore factors influencing GVC participation, and identify the economic variables affected by GVC engagement. The analysis reveals a predominant focus on developed nations rather than developing countries in the research on GVCs, with 75 studies discussing factors influencing GVC participation, such as GDP, servicification, trade agreements, digitalization, exchange rates, and non-tariff trade barriers. Additionally, 95 research papers examine the impact of GVC participation on economic indicators like labour productivity, employment, and GDP growth. However, studies specifically exploring the parameters for enhancing economic integration through GVCs in the Asia-Pacific region are limited and recent, underscoring the need for further research. This review highlights the growing importance of the Asia-Pacific region within the global value chain and emphasizes the potential for leveraging GVCs to foster economic integration.

Keywords: Global Value Chains, Economic Integration, Asia Pacific region, Trade in Intermediate Goods, TiVA

JEL Classifications: F10, F15, J18, O10

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1. Introduction

Economic integration agreements between countries frequently stipulate the synchronisation of monetary and fiscal policies as well as the elimination or reduction of trade barriers. There are many distinct types of economic integration, ranging from a loose affiliation of nations in a zone of preferential trade to total economic integration, in which member nations' economies are completely interwoven. Economic integration is supported by a number of reasons both globally and in the Asia-Pacific (APAC) region, where Global Value Chains (GVCs) play a significant role.

The term "Global Value Chain" (GVC) describes the collection of activities that take place in different countries and add value to a product from the time it is conceived to the time it is used. The expansion of GVCs is related to an increase in efficiency-seeking FDI, in which multinational corporations seek to place particular stages of their manufacturing process in low-cost locales.

GVCs can be used to analyse trade agreements and border regulations because they are a significant driving force in international trade. By combining value-added decomposition techniques with a calculable general equilibrium model, Flaig & Greenville (2021) examined the impact of APEC's tariff liberalisation on integration measures. The trade pact enhances GVC global integration, regardless of membership. Depending on the source of intermediate inputs, the participation of nations upstream and downstream of the supply chain, and the level of border protection at the base, different integration strategies have different effects. A few of the integration measures' weaknesses in a dynamic context are shown by the inquiry. First off, value added includes money earned from policy-related acts, and a decline in integration may indicate less taxation and more effective policy.

A variety of raw materials, labour, and technology are required to increase the production of goods in an economy. In these countries, various industrial components are either not self-sufficient or too expensive. A product should be produced in a nation where it can be done at the lowest cost if we wish to benefit from global trade. As a result, the countries can further specialise in creating fewer product lines, which increases their overall production efficiency. Therefore, trade-in items with value additions are required to restart the production cycle.

The Say's Law of Markets, which states that supply creates its own demand, may not be applicable, making an increase in global demand the most significant element driving increased output. Due to the COVID pandemic's adverse impact on global demand, trading in intermediate commodities is much more appealing than trading in final goods and services. While each continent has its own supply of natural resources, they also each have a particular collection of skills, resources, and financial means that may be employed to transform those resources into goods and services for both intermediate and final consumption. In this way, the purpose of enhancing international ties and trade is made clear. This casts doubt on the commonly held belief in globalisation and the laws put in place to promote it. This speeds up the process of connecting various dots related to people, finances, technology, transportation, and many other areas across countries where GVCs have played a significant role.

The goal of the current study is to thoroughly review the body of knowledge on economic integration and global value chains in this regard. The major objective of this article is to investigate how global value chains facilitate economic integration in the Asia-Pacific region. The significance of a number of variables influencing GVC

participation and the numerous variables that are impacted by GVC participation in the economy will be further examined.

2. Methodology

Peer-reviewed journal articles on the subject are the main secondary data sources for the current study. The widely adopted PRISMA Framework for undertaking systematic literature reviews has been used in the present study as a methodological framework. The PRISMA framework includes a methodical approach for gathering, evaluating, and synthesising information on international value chains that support regional economic integration in the Asia-Pacific area.

In order to make sure the research objectives were relevant to the subject, they had to be defined and adjusted at the beginning of the review process. The next step was database selection, which involved finding the databases that contained peer-reviewed publications, reports, practitioner comments, and proceedings related to the current topic. The main database used was SCOPUS, along with renowned publishers such as Emerald, JStor, Sage Publishing, Taylor & Francis, and Springer, due to their status as the largest and most reliable abstract and citation databases of peer-reviewed literature. Due to uncertainties regarding the quality and dependability of the information on numerous websites and publications, we refrained from using it. It is not required, but generally, publications published in Taylor & Francis, Springer, and Emerald are also in SCOPUS. In order to verify that all necessary research papers were extracted for review, we extracted papers from each of these databases and publishers separately and then eliminated the duplicates.

Further, we identified the key phrases designed to streamline the search procedure in line with this. “Global Value Chains”; “Economic Integration” “GVCs”; “GVC”; “GVC in Asia Pacific”; and “GVC participation” were the terminologies utilised in the research process.

The selected database and publishers were manually explored, and the search terms in the titles, key words, abstracts, and full texts of the recognised articles were also double-checked. Every search was restricted to journal articles and was valid for the whole database through the year 2022. Only English-language articles were within the scope of the sample. Then, only the areas of economics, international development, and policy were the main areas of the quest. 3028 credible articles were found overall, thanks to the search process. Compatibility testing was done during the evaluation phase to determine how appropriate the selected articles were.

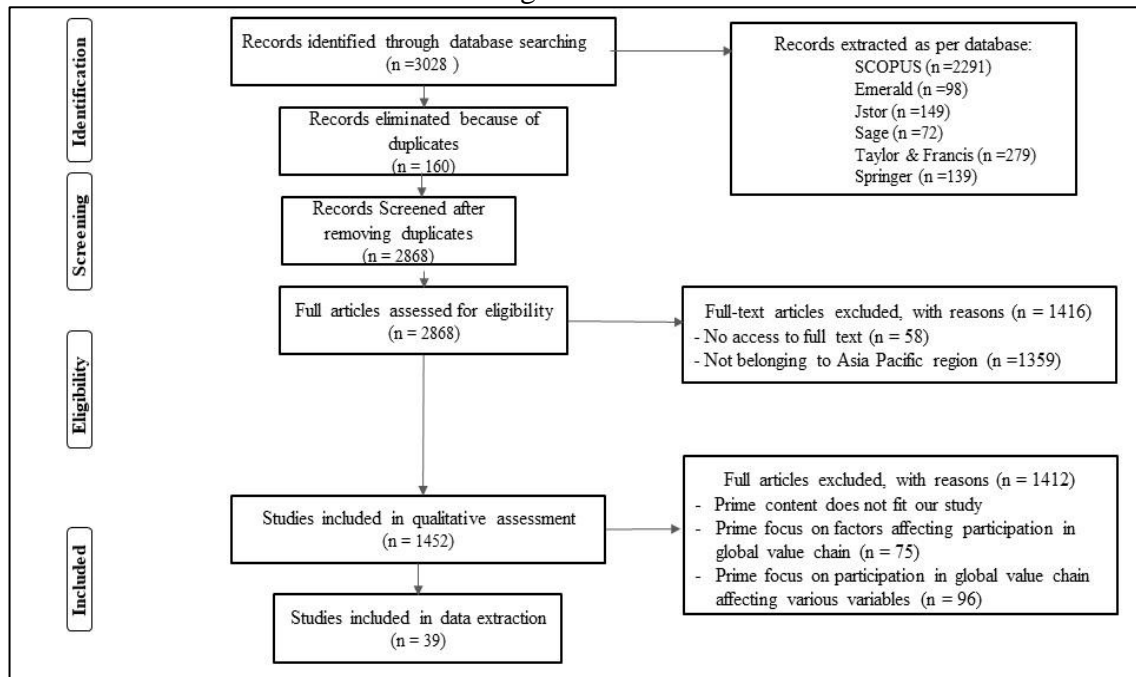
The selection criteria were based on the PRISMA Framework (Moher et al., 2009). The PRISMA approach also enables researchers to seek out knowledge gaps in the literature reviews that may serve as sources of information and direction for future work on the original substantive advantages for the emerging disciplines of GVCs. Our investigation is mostly focused on the Asia-Pacific area. Thus, articles from any other country were excluded. At this point, a total of 1359 research articles have been ignored, yielding 1669 records. Additionally, only original research publications that have appeared in a variety of journals are cited in the study. To maintain the high standard of the evaluation, every duplicate was thoroughly checked. After duplicate records were sorted out, 160 more articles were removed from the analysis.

The relevance of the subjects covered in the titles was then checked. Abstracts of the selected articles were also carefully scrutinised and filtered in order to guarantee the calibre and relevance of the academic content used in the review process. Later, each research report received a detailed analysis. In the beginning, 1412 research articles were

taken out of the study since they were thought to be unrelated to the topic. 58 publications were also unavailable; thus, these were excluded from the study as well. We ultimately selected 39 papers after comparing each submission to the aforementioned inclusion and exclusion standards.

Figure 1 below illustrates the entire PRISMA framework utilised for this study, which consists of four phases: screening, eligibility (quality assessment), inclusion, and identification (search strategy).

Figure 1: PRISMA Framework of Papers Reporting on Global Value Chains Promoting Economic Integration in Asia-Pacific



Source: Authors

3. Results

The selected research papers have the following traits in common:

1. Only articles published in journals were considered while published reports, case studies, and conference papers were excluded.
2. All articles address issues in public policy, economics, and international development.
3. The extracted articles appeared between 2000 and 2022.
4. The geographical coverage of the articles extracted was limited to APAC countries.

The annexure contains a bibliometric analysis of the papers that were discovered through database searching. Figure 1 shows the number of publications each year, showing that the number of publications is growing steadily over time. This indicates that the idea of the global value chain is becoming more and more important and well-known. The number of studies was quite limited before 2000 because conventional trading dominated the global market.

The number of studies published by various publishers and journals is displayed in Tables 1 and 2 of the annexures, respectively. The Tables only include publishers and journal names with at least 10 publications found through database searches. Most papers were published by Routledge (304), followed by Elsevier, Emerald, SAGE, and

numerous other publishers. Similarly, 148 research papers from our investigations were published in the journal "World Economy," followed by "Applied Economics," "Journal of International Economics," "Journal of Economic Integration," and so forth.

The systematic literature review paper conducted a comprehensive assessment of the risk of bias in the included studies, as explained in the methodology section. The overall risk of bias across the included studies was considered low, as most studies demonstrated rigorous methodological approaches and adequately addressed potential biases. However, a few studies were found to have a moderate risk of bias due to limitations in sample size, incomplete reporting, or potential conflicts of interest. The authors acknowledge these limitations and their potential impact on the overall conclusions of the systematic review.

The information regarding the final data extraction studies that were a part of the systematic literature review is included in Table 3 in the annexure. The majority of the articles were primarily about ASEAN members and Asian nations (Association of Southeast Asian Nations). Five studies use cross-country data to examine the data as a whole or to compare results across countries, including data from nations beyond the Asia-Pacific region. There are 20 publications in all that cover the entire world or a general topic without concentrating on any one nation or region. In quantitative studies, the OECD-WTO Trade in Value Added (TiVA) database is frequently used. Two more often employed analytical methods for resolving issues with global value chains are network analysis and the gravity model.

The analysis of the final publications chosen for evaluation on how GVC participation promotes economic integration in APAC yielded the following key findings:

Korwatanasakul (2022) provided a detailed analysis of the development of economic integration in Asia. It focuses on significant Asian economic blocs and dialogues. The empirical findings indicate that achieving total economic integration across the entire Asian continent is unlikely to happen in the near future. Thus far, integration has predominantly taken place in East and Southeast Asia, while other regions exhibit considerably lower levels of integration and globalization. Interestingly, this study challenges the notions presented in earlier literature, such as the importance of historical reconciliation, common institutions, and economic, political, and social heterogeneity in Asian economic integration. Instead, it emphasizes the forthcoming success of the ASEAN single market and the Regional Comprehensive Economic Partnership (RCEP) as key drivers. The Asia model's success is primarily attributed to the comprehensive scope, extensive depth, and strategic sequencing of the integration process, accompanied by relevant geopolitical factors.

Since the 1990s, South Asia and East Asia's economic integration has been progressively increasing owing to internal reforms and the establishment of regional supply chains. India has grown to be the East Asian economies' top trading and investment partner in South Asia. By examining issues including the degree of trade integration attained and barriers to deeper integration, Anbumozhi & Kalirajan (2020) evaluated the experience of South Asia and East Asia's economic integration. It was discovered that there are developing links between trade and investment, in addition to those that are merely coincidental. However, the insufficient depth in which existing trade agreements are used, obstacles to the exchange of services, and inadequate infrastructure connectivity prevent economic integration from reaching its full potential.

The Association of Southeast Asian Nations (ASEAN) is able to preserve its centrality in the context of the increasing economic integration in the Asia-Pacific region. With the exception of trade intensity, ASEAN's average eigenvector centrality from 2007 to 2013 is higher than that of the network, Andal (2017) revealed that ASEAN as a whole

is not generally maintaining centrality within the Asia Pacific region. It is also plausible for the nations around the Bay of Bengal and Andaman Sea (BoBAS)—India, Indonesia, Bangladesh, Thailand, Myanmar, Sri Lanka, Malaysia, and Singapore—to become one of the world's and Asia's fastest-growing regions. A number of elements, including history, culture, demographics, and technological advancement, bind these nations together (Kaul & Chowdhury, 2018).

Chen et al. (2017) examined the types of economic ties between Taiwan and Southeast Asia. Through GVCs, the authors discover a more entwined dynamic of “deep integration”. Taiwanese direct investment and bilateral trade with ASEAN members are the primary macroeconomic variables they look at. The textile and apparel business in Taiwan, which developed with the GVC led by brand marketers in advanced nations, is used to illustrate “the trade, investment, and service IP nexus” and to further cement economic ties between Taiwan and Southeast Asia. Further, the Trans-Pacific Partnership (TPP) was an effort to make it possible for regulatory systems to take this transition into account. Although the RCEP lacks ambition, there are other methods to achieve the goal of freer trade and investment in the Asia-Pacific area. In this context, New Zealand needs to keep looking into TPP as well as other integration options (Jacobi, 2017).

The governance of economic development in the age of globalisation is being transformed by the dynamics of global value chains and global production networks, according to recent studies. Researchers look at how, since the 1990s, the embedded relationship between one type of state institution, known as the developmental state, and national firms, well integrated into global chains and networks spanning different territories and regions, has changed based on recent developments in East Asian economies such as South Korea, Taiwan, and Singapore. Although the state has actively shifted its position within the evolving governance of these East Asian economies, it can no longer be considered the dominant force in guiding domestic enterprises and industrial change. The importance of global manufacturing networks and value chains in the evolving global political economy of development is further theorized by Yeung (2014).

While SMEs have been an engine of economic development, GVCs have grown more important in defining the patterns of global commerce, foreign direct investment (FDI), and growth potential in Asia and the Pacific. In order to support the dynamic insertion of SMEs into GVCs, this study aims to present effective development techniques and pertinent policy approaches. It was discovered that SMEs confront numerous difficulties, which can limit the advantages brought about by the growth of GVCs in Asia and the Pacific. Policymakers are urged to develop and implement appropriate strategies and policies to assist the expansion of SMEs in the context of ongoing globalization (Abe & Proksch, 2017).

Lee & Yun (2018) presented the first documentation of the vertical specialisation structure of the global pharmaceutical value chain using the 2014 World Input-Output Table Database, which categorises pharmaceuticals by their industry. The study shows how the pharmaceutical value chain, like other sectoral value chains, is influenced by geographical factors. Two regional value chains are identified by the study: a strong European value chain and a weaker Asian value chain. Korea is positioned in the middle of the Asian value chain and is connected to the European regional value chain as a second-tier supplier.

Evaluating the purpose and viability of China's involvement in global value chains (GVCs) has been a hot topic in both policy and research in recent years. Domestic value chains (DVCs) in China have gotten less attention because the majority of the research on GVCs in China focuses on international relations. Strong regional and local links can lead to specialisation improvements that boost productivity and boost domestic industries' competitiveness in GVCs. Meng et al. (2017) recommended that GVCs have

domestic bases as a result. According to Cieřlik (2019), the Visegrad Group (V4) members' standings in GVCs in specific industries relative to China have recently declined. Additionally, it is discovered that the V4 states have increased their reliance on Chinese value added, as evidenced by their gross exports of a few selected industries, but the inverse trend has not been seen.

The depth of free trade agreements has a significant positive effect on trade in general as well as exports of foreign value added (FVA) among member countries. Further, free trade agreements raise the export levels of both basic and complicated value chains while also encouraging value-added exports of all GVC trade sub-items at different levels, according to Zhang et al. (2021). Recent data, however, hints at a decreased level of production fragmentation. Furthermore, some academics assert the existence of regional supply chains rather than global ones. The "made in the world" narrative accurately describes the rise of GVCs in the 2000s. According to Miroudot & Nordström (2020), globalisation has slowed down since its peak in 2012, and supply chains are now more domestic than regional.

The effects of globalization and production fragmentation force nations to contend with two catching-up challenges: economic growth and an increase in living standards. In the meantime, national economies are significantly impacted by the insertion and upgrading of global value chains in numerous ways. The study agenda on the distributional effects of countries' integration into GVCs has been extensively studied, with a focus on developing nations. In order to ensure that the attainment of sustained economic gains is translated into social benefits, the study emphasizes the relevance of institutions in addition to the role of governments and MNE efforts. This can be accomplished through strengthening social welfare and labour institutions, improving innovation processes, and promoting and expanding local chains (Biurun et al., 2021).

Numerous studies have been conducted to better understand the design and operation of global manufacturing and economic networks. However, there hasn't been much investigation into how the spatial and structural characteristics of these networks have evolved through time. All network features examined in the pre-crisis period showed significant changes, according to the findings, whereas the post-crisis period was characterised by relatively constant growth and few changes. In the years following the crisis, it was shown that a nation's level of urbanisation significantly affected FDI. Numerous studies have been conducted to better understand the design and operation of global manufacturing and economic networks. However, there hasn't been much investigation into how the spatial and structural characteristics of these networks have evolved through time. All network features examined in the pre-crisis period showed significant changes, according to the findings, whereas the post-crisis period was characterised by relatively constant growth and little changes. In the years following the crisis, it was shown that a nation's level of urbanisation significantly affected FDI. Further, significant differences were observed in the locational characteristics between the two periods (Jiang & Tamang, 2020).

In a 2019 study, Kohpaiboon analysed the Thai services sector with a focus on both domestic and global value chains, highlighting the case of the logistics sector. Overall, the results indicate that Thailand's service industry has relatively low labour productivity when compared to other sectors. The logistics sector, on the other hand, is closely connected to well-known multinational firms and is well-integrated into global value chains. The findings also suggest that Thai enterprises have several opportunities to develop along regional and global value chains. In a 2019 study, Kohpaiboon analysed the Thai services sector with a focus on both domestic and global value chains, highlighting the case of the logistics sector. Overall, the results indicate that Thailand's service industry has relatively low labour productivity when compared to other sectors.

The logistics sector, on the other hand, is closely connected to well-known multinational firms and is well-integrated into global value chains. The findings also suggest that Thai enterprises have several opportunities to develop along regional and global value chains. Additionally, Pananond's (2013) research demonstrated that emerging Thai MNEs come from industries with globally interconnected value chains. They learned that expanding Thai multinationals internationalise in the direction of their global value chain governance in order to enhance their position within the chain structure.

Anbumozhi & Kalirajan's (2021) evidence-based study revealed that some GVCs have been more prepared than others to recover from inevitable vulnerabilities and unanticipated events, such as the COVID-19 pandemic. A different study by Meshkova & Moiseichev (2016) looked at the potential for bolstering the empirical and methodological foundations of GVC research as well as for making pertinent political decisions, primarily through the use of foresight methodology built on the most recent trend to combine the approaches of global value chain and national innovation system research. The authors reach the conclusion that both comprehensive foresight studies and particular portions thereof could be employed for GVC analysis, strategic planning, and political decision-making.

India originally allowed international competitors into her domestic market in the early 1990s, but it wasn't until the early 2000s, when India started to sign additional regional and bilateral free trade agreements, that the dynamics of commerce really started to pick up. Between 2000–2001 and 2017–2018, imports more than doubled, from \$50 billion to \$384 billion. One of the implications of the policy of import liberalisation was the internationalisation of the industrial process. The import intensity of exports indicates that a rise in imported inputs in the export sector did not have a beneficial impact on exports, according to input-output data for several years up until 2013–2014. Additionally, the impact of these imported inputs led to a rise in the demand for trained labour as contrasted to India's abundant supply of labour with lower levels of skill. To enable increasing imports of intermediate inputs necessary to raise the productivity of exporting firms, the heterogeneity of the Indian industry should be taken into account while negotiating trade agreements in the future (Paul & Kumar, 2021).

The article by Purwono et al. (2020), which used the Inter-Country Input-Output model, discovered that Indonesia differs from its ASEAN partners in that it includes larger proportions of domestic value-added in its exports than they do, plays a stronger role in the export of intermediate goods than they do, is more focused on regional partners, and has a lower presence than others in high technological exports. They also discovered that greater regional integration and more active participation within dispersed production networks led to an increase in Indonesian value-added exports of more than 300 percent between 1995 and 2011.

3.1 Factors affecting and affected by participation of countries in GVCs

Numerous papers have been discovered in the database analysis that concentrate on various factors influencing nations' decisions to participate in GVC and various economic variables that are impacted by the growing participation of countries in GVC. There are 95 research publications that discuss how different economic variables are impacted by GVC involvement and 75 studies that discuss various factors that affect GVC participation.

A study by Ahmed & Kumar (2018) on global value chains intended to pinpoint the variables that affect developing nations' participation in GVCs and to propose a mathematical modelling approach to determine a "National Participation Index of a Developing Country in the GVC" (G-NPI). The graph theoretic modelling method has been used to determine the G-NPI. The paper uses the example of India to analyze the

degree of interaction. This research paper can be used to advocate for policies that will increase the competitiveness of emerging nations and, as a result, improve the quality of life for their consumers.

Another study aims to investigate the effects of global value chain (GVC) participation and related increases in employment and labour productivity across 16 Asia-Pacific nations. The outcome reveals an increase in GVC involvement among Asia-Pacific nations. The results also demonstrate the long-term link between GVCs and labour productivity (Jangam, 2021). According to a different study, increased value-chain activities in some emerging countries' high-skill-intensive industries result in lower salaries for low-skilled workers, which raises the skill wage premium. Thus, the study makes the case that the consequences of rising value-chain activities on wages vary by nation, industry, and skill level (Márquez-Ramos, 2021).

According to Taguchi (2014), an economy's involvement in GVCs in the manufacturing sector has made it possible for an absolute domestic value added for exports to boost GDP growth. In an economy that participates in the GVCs, the domestic value-added contribution to export growth has followed a "smile curve," with the lowest per capita GDP at \$5,651 USD. Additionally, the smile curves' turning points varied depending on the manufacturing sectors: food, textile, and wood goods reach the turning point at a lower per capita GDP than the mechanical, electrical, and transportation equipment sectors.

According to the study, a firm's markup decreases as its level of integration into a GVC increases (as shown by the proportion of export value added and imported inputs in total sales). Additionally, it was shown that because of horizontal rivalry and backward linkages, firms operating in sectors with a relatively large GVC presence and suppliers selling inputs to these sectors typically had lower markups. All of these data imply that Ethiopian businesses face more competition when they participate in GVC (Choi et al., 2021).

The effectiveness of corporate global supply chain solutions to solve social and environmental issues is a topic of considerable discussion. The majority of the study examines the conditions under which supply chain solutions are effective, where they fall short, and how efficacy could be gradually increased. Global supply chain solutions are considered to have hidden costs, such as unexpected repercussions, perverse effects, and unacknowledged impacts, in addition to falling short on many of the most important metrics (LeBaron & Lister, 2022). Both tariffs and non-tariff measures (NTMs) have a detrimental effect on backward GVC participation, with NTMs having a bigger impact than tariffs. Therefore, reducing the costs of trade caused by NTMs, in particular, can serve to encourage participation in GVCs (Korwatanasakul & Baek, 2021).

4. Discussion and Conclusion

To draw conclusions and pinpoint research gaps in the areas of global value chains, a systematic evaluation of the literature is conducted using the PRISMA framework and database extraction from various sources. The results show that developing strategies for joining dynamic GVCs, which promote more trade and investment and deeper economic integration, is the main challenge for rising nations. Additionally, it has been found that regional and bilateral trade agreements among states increase member countries' participation in GVCs, which promotes greater integration.

Regarding the development of GVCs, a thorough review of the literature reveals that global value chains were only first studied by scholars in the year 2000. Since developed countries are the key participants in value chains, the majority of studies place

more emphasis on them than on developing ones. As a result, a number of studies focused on the impact of GVC involvement on economic integration among those countries are available for countries beyond the Asia-Pacific area, especially those in Europe and Africa. Few studies have recently concentrated on China and its influences on GVCs.

Numerous studies have examined the elements that affect a nation's participation in GVCs. These include, among others, the GDP of the nation, servicification, trade agreements, digitalization, exchange rate, and trade expenses, particularly non-tariff obstacles. There are 75 papers that discuss various aspects of what influences GVC involvement. These studies also included the benefits of both backward and forward participation as well as suggestions for improving countries' value chain engagement. However, there were few research studies available that covered the variables influencing emerging and developing nations' participation in GVCs.

In addition, 95 research publications discuss how GVC involvement affects key economic indicators. The literature provides insights on how GVC membership affects employment and labour productivity in countries in the Asia-Pacific. The findings show a long-term relationship between GVCs and labour productivity. The effects of growing value-chain activities on salaries are seen to differ by country, industry, and skill level. Participation in GVCs by a nation contributes to the growth of its GDP. The studies also revealed that businesses participating in GVC suffer higher levels of competition.

Studies on Asia-Pacific countries, however, that investigate the factors that should be taken into account to enhance economic integration through global value chains are few and relatively new. This shows that the area is evolving into a significant link in the global value chain; however, additional study is required. To persuade Asia-Pacific nations to focus their attention on this important issue, it is imperative to foresee the beneficial effects of economic integration via global value chains. It is therefore necessary to undertake additional study on the effects of country membership in GVCs on total trade and, consequently, economic integration.

Some restrictions on the review procedure should be noted, though. While every effort was made to conduct a thorough search of pertinent databases and sources, it's still likely that some papers may have been overlooked, which could have resulted in publication bias. The review was also restricted to studies published between 2000 and 2022, which might have left out more current and pertinent research. Due to tight eligibility requirements, certain research may have unintentionally been omitted from consideration due to the inclusion criteria used during the screening process. Regardless of these drawbacks, the review procedure followed strict methodology criteria, and steps were taken to reduce bias through independent screening, data extraction, and risk of bias evaluation.

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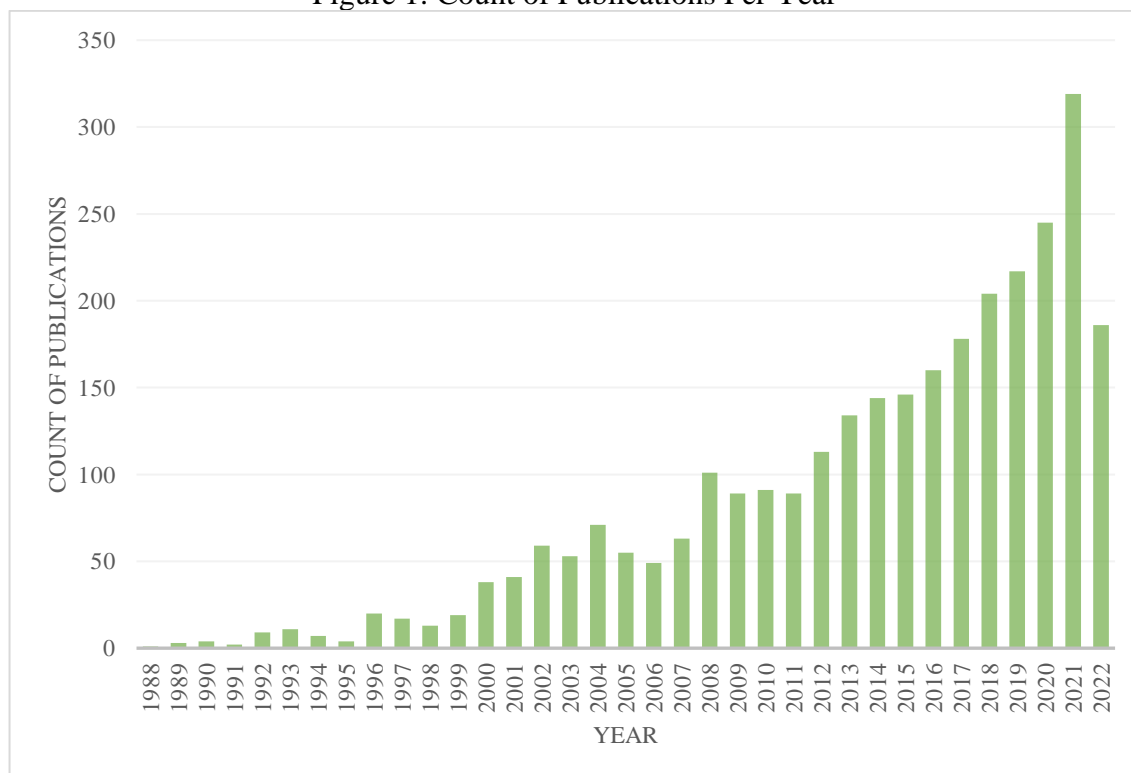
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Annexure

Figure 1: Count of Publications Per Year



Source: Authors

Table 1: Count of Papers under Different Publishers

Publisher Name	Count
Routledge	304
Elsevier B.V.	86
Emerald Publishing Limited	70
Elsevier Ltd	41
SAGE Publications Ltd	38
Center for Economic Integration, Sejong University	34
Blackwell Publishing Ltd	32
Oxford University Press	32
Emerald Group Publishing Limited	28
American Economic Association	25
John Wiley and Sons Inc	25
SAGE Publications India	24
ISEAS - Yusof Ishak Institute	21
Elsevier Inc.	20
Springer	19
Springer Science and Business Media Deutschland GmbH	15
SAGE Publications Inc	10
Others	1452

Source: Authors

Table 2: Count of Papers under Different Journals

Journal Title	Count
World Economy	148
Applied Economics	76
Journal of International Economics	61
Journal of Economic Integration	60
Applied Economics Letters	59
European Economic Review	53
Review of International Political Economy	53
Open Economies Review	46
World Development	43
Post-Communist Economies	36
Structural Change and Economic Dynamics	35
Energy Economics	30
Journal of Economic Geography	28
Singapore Economic Review	28
Eurasian Geography and Economics	27
Economics of Transition	26
Review of World Economics	26
Eastern European Economics	24
Economic Systems Research	23
Empirical Economics	22
International Journal of Finance and Economics	22
Journal of Korea Trade	22
Journal of Southeast Asian Economies	22
Journal of African Economies	21
Applied Financial Economics	20
Journal of Economic Literature	20
Journal of World Trade	20
South African Journal of Economics	20
Acta Oeconomica	19
Journal of Asian Economics	19
Oxford Review of Economic Policy	19
Pacific Economic Review	19
Europe - Asia Studies	18
Cambridge Journal of Economics	17
Economic Geography	17
Journal of Business Ethics	17
Resources Policy	17
Economic Change and Restructuring	16
Emerging Markets Finance and Trade	16
International Economics	16
Regional Science and Urban Economics	16
Transnational Corporations Review	16
Economic Journal	15
Economic Modelling	15
International Economic Journal	15
Journal of International Business Studies	15

Journal Title	Count
Economic Policy	14
Contributions to Economics	13
Finance and Development	13
Journal of International Management	13
Ekonomicky casopis	12
Global Economic Review	12
International Review of Applied Economics	12
Critical perspectives on international business	11
Economics Letters	11
Empirica	11
Food Policy	11
Foreign Trade Review	11
Journal of Development Economics	11
Journal of Financial Economic Policy	11
Cambridge Journal of Regions, Economy and Society	10
Journal of International Business Policy	10
Scandinavian Journal of Economics	10
Others	1386

Source: Authors

Table 3: Summary Characteristics of 39 Eligible Studies in Systematic Review

SN	Authors	Paper Title	Year	Country	Type of Study	Focus/ Objective/ Results	Methodology
1	Karkanis, D., & Fotopoulou, M.	Trade integration, product diversification and the gravity equation: evidence from the Chinese merchandise imports	2022	China	Quantitative	The purpose of this paper is to identify trade integration and structure effects on bilateral trade between China and its partners, during the period 1995–2018.	Augmented gravity model, by use of the ordinary least squares (OLS) and Poisson pseudo maximum likelihood (PPML) estimators.
2	Korwatanasakul, U.	Revisiting Asian economic integration: challenges and prospects	2022	Asian countries	Quantitative	Covering major Asian economic blocs and dialogues, this study comprehensively reviews the progress of “Asian” economic integration.	Empirical Literature review
3	Biurun, A., Castilho, M. D. R., Marín, R., & Quirós, C.	Upgrading and inequality in global value chains: Challenges for inclusive and sustainable development	2021	General	Theoretical	A critical review of both the existing literature on the relationship between economic and social upgrading and the methodological approaches to GVC integration.	Literature review
4	Flaig, D. & Greenville, J.	Trade Liberalization in APEC and Global Value Chain Participation: What Can Value Added Indicators Tell?	2021	General	Theoretical	GVCs are an increasingly important driver of world trade. The paper shows how tariff liberalization in APEC impacts on measures of integration.	Combining methods of value added decomposition and a computable general equilibrium model
5	Podrecca, Matteo, et al.	Manufacturing internationalization: from distance to proximity? A longitudinal analysis of offshoring choices	2021	General	Quantitative	This paper aims to offer a long-term systematic picture of the evolution of manufacturing offshoring highlighting the resulting transition points that have shaped its development path.	Three statistical tools: multiple structural change tests; network analysis; gravity models

SN	Authors	Paper Title	Year	Country	Type of Study	Focus/ Objective/ Results	Methodology
6	Zhang, R., Zhao, J., & Zhao, J.	Effects of free trade agreements on global value chain trade - a research perspective of GVC backward linkage	2021	General	Quantitative	Empirical analysis shows that, first, the depth of free trade agreements has significant positive effects on both the total trade and exports of foreign value added (FVA) among member countries.	Using the World Input-Output Database from 2000 to 2014 combined with the Database from the World Bank.
7	Anbumozhi, V., & Kalirajan, K.	Building innovative, inclusive and resilient global value chains	2021	General	Quantitative	The purpose of the study is to analyze the process of building Innovative, Inclusive and Resilient Value Chains, and their impact on the socio-economic development of Asia and beyond.	TiVA database
8	Paul, M., & Kumar, R. A.	Import intensity of India's manufactured exports: an industry level analysis	2021	General	Quantitative	The paper aims to study import intensity trends of broad manufacturing sectors which are engaged in export activities over the years 2003 to 2014; to assess the impact of import intensity on exports; to explore the import intensity on skill levels in India's organized manufacturing sector.	Secondary data from ASI, NSS, NCAER, UN - COMTRADE. Industry and input-output sectors were made comparable using appropriate concordance tables to match with NIC categories.
9	Yanikkaya H., Karaboga H., Altun A.	Implications of participation in global value chains for international trade network	2021	General	Quantitative	It is found that forward participation in GVCs is associated with more clustered but fewer trade links. However, there seems to be a consensus in the region that it requires only a loose form of integration.	The authors combined UNCTAD – EORA with CEPII Gravity, GeoDist, and BACI datasets. In contrast to Gravity model, they incorporated participation indices with network measures.

SN	Authors	Paper Title	Year	Country	Type of Study	Focus/ Objective/ Results	Methodology
10	Miroudot, S., & Nordström, H.	Made in the World? Global Value Chains in the Midst of Rising Protectionism	2020	General	Theoretical	The study offers a comprehensive review of the evidence based on the 2018 update of the OECD trade in value added database.	Literature review
11	Jiang, R., & Tamang, T.	The Evolutionary Dimensions of Global Investment Networks	2020	General	Quantitative	This article investigates the evolutionary patterns of global economic networks from 2000 to 2007 and from 2008 to 2016	Foreign direct investment (FDI) data from the Zephyr Mergers and Acquisitions (M&A) database
12	Anbumozhi V., Kalirajan K.	South Asia's economic integration with east Asia: An exploratory analysis with a focus on India	2020	India	Descriptive	It is found that attaining the full potential of economic integration is constrained by the insufficient depth in the use of existing trade agreements, barriers to service trade, and poor infrastructure connectivity.	Questions such as the extent of trade integration achieved and impediments to deepening integration were addressed.
13	Purwono R., Esquivias M.A., Sugiharti L., Heriqbaldi U., Handoyo R.D.	Value chains, production networks and regional integration: The case of Indonesia	2020	Indonesia	Quantitative	The results indicate that Indonesian value-added exports expanded by more than 300% from 1995 to 2011. Indonesia differs from its ASEAN partners as it incorporates larger shares of domestic value-added in its exports than they do.	Inter-Country Input-Output model
14	Kohpaiboon, A.	Services in Thailand and Participation in Global Value Chains	2019	Thailand	Quantitative	This paper examines the services sector in Thailand with a focus on regional and global value chains, highlighting the case of the logistics sector.	Empirical Literature review & Case Studies
15	Cieřlik, E.	Looking for the sectoral interdependence: evidence from the Visegrad countries and China	2019	China and V4 Member countries	Quantitative	It is found that the V4 countries have deteriorated their positions in GVCs in relation to China in selected sectors recently; and the V4 states have become more dependent on Chinese value added.	The sectoral links between China and the V4 countries are investigated.

SN	Authors	Paper Title	Year	Country	Type of Study	Focus/ Objective/ Results	Methodology
16	Lee, C. S., & Yun, M.	Accounting of gross exports and tracing foreign values in the global pharmaceutical value chain	2018	General	Quantitative	The vertical specialization structure of the global pharmaceutical value chain is documented.	Wang et al.'s (2013) gross exports decomposition method using the 2014 WIOT database.
17	Abe, M., & Proksch, M.	Supporting participation of Asia-Pacific SMEs in global value chains	2017	Asia Pacific countries	Qualitative	The purpose of this paper is to provide effective development strategies and relevant policy approaches to facilitate dynamic insertion of SMEs into GVCs.	Sectoral case studies on agribusiness, garment/apparel, automotive and electronics
18	Andal, E. G. T.	ASEAN centrality amidst economic integration in the Asia Pacific region	2017	ASEAN	Quantitative	This paper evaluate the extent to which the ASEAN is able to maintain its centrality in the context of the emerging economic integration in the Asia Pacific region and also determines corresponding strength of these trade flows.	Employing methodology derived from network analysis, this paper maps Asia Pacific-related trade flows.
19	Chen, S. H., Wen, P. C., & Liu, M. C.	Late Development Through and Beyond Deep Integration: The Evolution of Taiwan's Economic Links with Southeast Asia	2017	Taiwan and South east Asia	Quantitative	This research note investigates the nature of Taiwan's economic links with Southeast Asia. Further a more intertwined dynamic of "deep integration" through GVCs is identified.	The macro data of Taiwanese direct investment and bilateral trade with ASEAN member countries.
20	Meng, B., Fang, Y., Guo, J., & Zhang, Y.	Measuring China's domestic production networks through Trade in Value-added perspectives	2017	China	Quantitative	This paper re-measure the inter-industrial and interregional linkages in China's Domestic Value Chains.	Trade in Value-added (TiVA) concept and the decomposition of domestic-regional trade
21	Matsumura, A.	Regional Trade Integration by Environmental Goods	2016	APEC countries	Quantitative	With the emphasis on the effects of regional trade integration and production fragmentation, this paper investigates the determinants of trade networks, according to the APEC classification.	Gravity analysis

SN	Authors	Paper Title	Year	Country	Type of Study	Focus/ Objective/ Results	Methodology
22	Xing, Y.	Global Value Chains and China's Exports to High-income Countries	2016	China	Quantitative	This paper argues that global value chains (GVCs) have functioned as a vehicle for 'Made in China' products to enter international markets, especially markets of high-income countries.	Panel data of bilateral processing exports covering more than 100 of China's trade partners
23	Meshkova, T. A., & Moiseichev, E. I.	Russia's experience of foresight implementation in global value chain research I.	2016	Russia	Quantitative	The paper analyzes the scope for improving empirical and methodological foundation of GVC research and for making relevant political decisions.	Foresight methodology based on the latest trend and number of case studies.
24	Banga, R.	Linking into Global Value Chains Is Not Sufficient: Do You Export Domestic Value-Added Contents?	2014	General	Quantitative	This paper compares alternative ways of measuring the participation of a country in GVCs and estimates the distribution of gains among countries in terms of countries' shares in total value-added created by trade under GVCs.	OECD-WTO database on Trade in Value Added
25	Dinda, S.	China integrates Asia with the world: an empirical study	2014	China	Quantitative	This paper focuses on China's economic integration with the Asia region and the world. It also found a long-run relationship with the short-run dynamics of China's trade in Asia and the world.	The augmented Dickey–Fuller and Phillips–Perron methods; Co- integration technique
26	Fung, K. C.	Regional and global production networks: the case of China	2014	China	Qualitative	The purpose of this paper is to examine various aspects of regional and global production networks.	The author studies four different approaches to measure production networks.
27	Smith, A.	The state, institutional frameworks and the dynamics of capital in global production networks	2014	General	Theoretical	This paper explores a strategic-relational understanding of the state and the re-articulation of scales of state formation to understand the	Review

SN	Authors	Paper Title	Year	Country	Type of Study	Focus/ Objective/ Results	Methodology
						dynamics of global production networks.	
28	Taguchi, H.	Dynamic Impacts of Global Value Chains Participation on Asian Developing Economies	2014	Developing Asian countries	Quantitative	This article aims to investigate the dynamic economic impacts of GVCs participation by examining value-added trade patterns focusing on Asian developing countries.	World Input Output Database
29	Yeung, H. W. C.	Governing the market in a globalizing era: Developmental states, global production networks and inter-firm dynamics in East Asia	2014	East Asian countries	Theoretical	This paper focuses on the changing governance of economic development in a globalizing era in relation to the dynamics of global value chains and global production networks.	Literature review
30	Pananond, P.	Moving along the value chain: Emerging Thai multinationals in globally integrated industries	2013	Thailand	Quantitative	This article analyses the internationalization strategy of Thai multinationals.	Database of listed firms in the Stock Exchange of Thailand
31	de Benedictis L., Tajoli L.	The World Trade Network	2011	World	Quantitative	The paper shows that trade policies do play a role in shaping the trade network and that WTO members are more closely connected than the rest of the world.	Network analysis
32	Kim S., Lee J.-W., Park C.-Y.	Emerging Asia: Decoupling or recoupling	2011	East Asia	Quantitative	Empirical findings show that real economic interdependence increased significantly in the post-crisis period, suggesting 'recoupling', rather than decoupling, in recent years.	A panel vector auto regression (VAR) model
33	Ahmed S.	Free Trade among South, East and South-East Asian Countries: A Step towards Asian Integration	2009	South Asia	Quantitative	The study reveals that tariff liberalization has positive effects on all country groupings of South, East, and Southeast Asian nations, with no	GTAP Model

SN	Authors	Paper Title	Year	Country	Type of Study	Focus/ Objective/ Results	Methodology
						or nominal negative effect on the rest of the world.	
34	Pal D.P., Dietzenbacher E., Basu D.	Economic integration: Systemic measures in an Input - Output framework	2007	General	Case Study	Countries are linked through trade, and their integration changes over time. The analysis is conducted to assess the inter-temporal variations in the degree of integration of SAARC.	Input-output framework
35	Ahn C.Y., Cheong I.	A search for closer economic relations in East Asia	2007	East Asia	Descriptive	This paper attempts to discuss emerging economic integration efforts in East Asia with special reference to bilateral and regional free trade agreements.	Descriptive analysis using tables and graphs
36	Kim S.T., Hoe E.K.	China's changing economic structure and implications for regional patterns of trade, production and integration	2006	China	Descriptive	China has, in recent years, played a major role in East Asia's economic integration. It has done so mainly through the production and supply chain networks it has spun across the region.	Literature review
37	Lim R.	Creating a globally connected Asian community	2006	India & China	Descriptive	The success of an Asian community depends on three key factors: economic integration in Asia, the regional policies of China and India, and having viable partners across Asia. Furthermore, the emerging Asian community must not be a rival to other regions or be a closed one.	Literature review
38	Henderson, J., Dicken, P., Hess, M., Coe, N., & Yeung, H. W. C.	Global Production Networks and the Analysis of Economic Development	2002	General	Theoretical	This article outlines a framework for the analysis of economic integration and its relation to the asymmetries of economic and social development.	Literature review

SN	Authors	Paper Title	Year	Country	Type of Study	Focus/ Objective/ Results	Methodology
39	Sharma S.C., Chua S.Y.	ASEAN: Economic integration and intra- regional trade	2000	ASEAN countries	Quantitative	Analysis reveals that trade in ASEAN countries increases with the size of the economy. The ASEAN integration scheme did not increase intra-ASEAN trade, but an increase in trade occurred with members of a wider APEC group.	Gravity Model

Source: Authors

Table 4: PRISMA 2020 Checklist

Section and Topic	Item	Checklist item	Location where item is reported
TITLE			
Title	1	Identify the report as a systematic review.	Page 1
ABSTRACT			
Abstract	2	See the PRISMA 2020 for Abstracts checklist.	Page 1
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of existing knowledge.	Para 1-3 of this section
Objectives	4	Provide an explicit statement of the objective(s) or question(s) the review addresses.	Last para of this section
METHODS			
Eligibility criteria	5	Specify the inclusion and exclusion criteria for the review and how studies were grouped for the syntheses.	Para 1 of this section
Information sources	6	Specify all databases, registers, websites, organisations, reference lists and other sources searched or consulted to identify studies. Specify the date when each source was last searched or consulted.	Para 2-3 of this section
Search strategy	7	Present the full search strategies for all databases, registers and websites, including any filters and limits used.	Para 4 of this section
Selection process	8	Specify the methods used to decide whether a study met the inclusion criteria of the review, including how many reviewers screened each record and each report retrieved, whether they worked independently, and if applicable, details of automation tools used in the process.	Para 6 of this section
Data collection process	9	Specify the methods used to collect data from reports, including how many reviewers collected data from each report, whether they worked independently, any processes for obtaining or confirming data from study investigators, and if applicable, details of automation tools used in the process.	Para 6 of this section
Data items	10a	List and define all outcomes for which data were sought. Specify whether all results that were compatible with each outcome domain in each study were sought (e.g., for all measures, time points, analyses), and if not, the methods used to decide which results to collect.	Para 5 of this section
	10b	List and define all other variables for which data were sought (e.g., participant and intervention characteristics, funding sources). Describe any assumptions made about any missing or unclear information.	NA
Study risk of bias assessment	11	Specify the methods used to assess risk of bias in the included studies, including details of the tool(s) used, how many reviewers assessed each study and whether they worked independently, and if applicable, details of automation tools used in the process.	NA

Section and Topic	Item	Checklist item	Location where item is reported
Effect measures	12	Specify for each outcome the effect measure(s) (e.g., risk ratio, mean difference) used in the synthesis or presentation of results.	NA
Synthesis methods	13a	Describe the processes used to decide which studies were eligible for each synthesis (e.g., tabulating the study intervention characteristics and comparing against the planned groups for each synthesis (item #5)).	Para 5 of this section
	13b	Describe any methods required to prepare the data for presentation or synthesis, such as handling of missing summary statistics, or data conversions.	NA
	13c	Describe any methods used to tabulate or visually display results of individual studies and syntheses.	NA
	13d	Describe any methods used to synthesize results and provide a rationale for the choice(s). If meta-analysis was performed, describe the model(s), method(s) to identify the presence and extent of statistical heterogeneity, and software package(s) used.	NA
	13e	Describe any methods used to explore possible causes of heterogeneity among study results (e.g., subgroup analysis, meta-regression).	NA
	13f	Describe any sensitivity analyses conducted to assess robustness of the synthesized results.	NA
Reporting bias assessment	14	Describe any methods used to assess risk of bias due to missing results in a synthesis (arising from reporting biases).	NA
Certainty assessment	15	Describe any methods used to assess certainty (or confidence) in the body of evidence for an outcome.	NA
RESULTS			
Study selection	16a	Describe the results of the search and selection process, from the number of records identified in the search to the number of studies included in the review, ideally using a flow diagram.	Para 1 and Figure 1 of this section
	16b	Cite studies that might appear to meet the inclusion criteria, but which were excluded, and explain why they were excluded.	NA
Study characteristics	17	Cite each included study and present its characteristics.	Para 3 of this section
Risk of bias in studies	18	Present assessments of risk of bias for each included study.	Para 4 of this section
Results of individual studies	19	For all outcomes, present, for each study: (a) summary statistics for each group (where appropriate) and (b) an effect estimate and its precision (e.g. confidence/credible interval), ideally using structured tables or plots.	Para 2 of this section
Results of syntheses	20a	For each synthesis, briefly summarise the characteristics and risk of bias among contributing studies.	All paras from Para 5 of this section

Section and Topic	Item	Checklist item	Location where item is reported
Reporting biases Certainty of evidence	20b	Present results of all statistical syntheses conducted. If meta-analysis was done, present for each the summary estimate and its precision (e.g., confidence/credible interval) and measures of statistical heterogeneity. If comparing groups, describe the direction of the effect.	Table 3 of Appendix
	20c	Present results of all investigations of possible causes of heterogeneity among study results.	NA
	20d	Present results of all sensitivity analyses conducted to assess the robustness of the synthesized results.	NA
	21	Present assessments of risk of bias due to missing results (arising from reporting biases) for each synthesis assessed.	Para 4 of this section
	22	Present assessments of certainty (or confidence) in the body of evidence for each outcome assessed.	NA
DISCUSSION			
Discussion	23a	Provide a general interpretation of the results in the context of other evidence.	Para 1-4 of this section
	23b	Discuss any limitations of the evidence included in the review.	Para 5 of this section
	23c	Discuss any limitations of the review processes used.	Para 6 of this section
	23d	Discuss implications of the results for practice, policy, and future research.	Para 5 of this section
OTHER INFORMATION			
Registration and protocol	24a	Provide registration information for the review, including register name and registration number, or state that the review was not registered.	NA
	24b	Indicate where the review protocol can be accessed, or state that a protocol was not prepared.	NA
	24c	Describe and explain any amendments to information provided at registration or in the protocol.	NA
Support	25	Describe sources of financial or non-financial support for the review, and the role of the funders or sponsors in the review.	NA
Competing interests	26	Declare any competing interests of review authors.	NA
Availability of data, code and other materials	27	Report which of the following are publicly available and where they can be found: template data collection forms; data extracted from included studies; data used for all analyses; analytic code; any other materials used in the review.	NA

Source: Authors