



# How has Covid-19 affected the Global Value Chains?

## A dive into the development of academic literature

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## Abstract

Global Value Chains (GVC) have been a focus of academic analysis for a long time, where academics have taken different perspectives depending on the sociological, economic and political standpoints. By dividing the available literature in three main time spans, we have produced a literature review regarding GVC and the influence of external factors such as the Financial Crisis in 2008 and the Covid-19 pandemic. The gaps within the literature for each of the segments were identified, where there seems to be a lack of the inclusion of the service departments, value creation activities, implications of external actors as well as the need to further research how unexpected global crises influence the processes in GVC's. From this literature review, we see the tendencies when it comes to globalisation and its impacts, where in the first period, there is agreement upon fragmentation and globalisation of GVC. With the beginning with the Financial Crisis, however, we start seeing the rudiment of deglobalisation of the production. This deglobalisation seems to be well represented in the final division, with the beginning of Covid-19; however, it is unclear to what extent it will impact the GVC.

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## 1. Introduction

Globalisation is unceasingly unfolding into new understandings. We are experiencing growth, especially due to the interconnected dynamics of global capitalism and society, which tends to stem from communication technologies that are more entangled than ever. Nevertheless, at the same time, uncertainty and opposed movements to hyper globalisation have been settled in this landscape. The hegemonic trade war between the U.S. and China, the instability and Euroscepticism movements exemplified by "Brexit", protectionism legislations being favoured by nations and leaders, and lastly, the recent global pandemic with Covid-19, are factors that are shaking the international political and economic scene. Moreover, these two distinct waves of movements are displaying critical polarisation in society.

This paper looks at the pandemic that expanded across borders, beginning of 2020. This global pandemic has opened multiple discussions and research regarding its consequences on the international political economy landscape. The closing of borders, travel restrictions and the different policies established by the leaders of the nations in order to protect the health and wellbeing of their societies, has resulted in a disconnection between states, which has influenced the transnational trade and international economic market. By reviewing key Global Value Chains (GVC) literature from the last 35 years, this paper aims to identify, when this counter process of globalisation has begun and the events that have led to it. Moreover, it will assess the possibilities whether Covid-19 will reshape the international trading, GVC and global production networks contributing to less globalised markets; and if this could be the final result of a phase of high levels of globalisation.

### 1.1. Search strategies

Initially, the search began by examining relevant journals in the fields of international political economy. The primary data based were journals such as "Review of International Political Economy", "Cambridge Journal of Economics", "World Development", "3rd World Countries", "Journal of Business Ethics", "New Political

Economy", "Competition and Change", and "Journal of Economic Geography". The key articles have been found on the Danish Royal Library, Roskilde University online library and Google Scholar.

The core focus of this literature review is GVC's, the effects of deglobalisation and Covid-19 in the global economy. In order to collect relevant literature, specific search streams have been adopted from the previously mentioned journals, which look at the multidisciplinary academic research papers, and their contributions to GVCs. Some of the search streams included combinations of keywords such as Global Value Chain AND Governance as well as Global Value Chain AND Power, Global Value Chain AND Governance AND Power, Covid-19, Financial crisis (2008), Globalisation AND Deglobalization and lastly Offshoring AND Outsourcing. Also, covid-19 pandemic, covid-19 economic crisis, covid-19 and financial crisis 2008 have been used in order to find articles related to the current situation and the assumptions for the implications of the pandemic on the GVCs. Moreover, terms such as globalisation, deglobalisation, power and governance were one of the main concepts found; thus, they were included in the search stream to expand the literature search. When looking into the time frame, there are two main events taking place, and those are the financial crisis of 2008 and the Covid pandemic in 2019. Therefore, the aim is to explore how those events affected the literature about the GVC and if they are in a way, correlated.

The research was narrowed to texts that were primarily peer-reviewed articles or existing literature reviews on the subject of GVC and Global Commodity Chains.

A vast majority of the articles did not argue the governance of value chains but rather revolved around the management and operations of coordinating a GVC. These articles were disregarded as they did not serve as relevant sources of information or argumentation for the core focus. Moreover, reverse literature was conducted within the already found materials, which led to 5 additional articles that were deemed appropriate regarding our purpose.

For each academic article used in the literature review, a reading card was created, which served as a framework to dissect and summarise the readings in the main arguments, theories, and methodologies. This tool helped in creating a full organised

overview of the readings and gave an insight into the evolution in time of the GVC, and the possible impact Covid-19 could have in them with the current shared global economy.

## 1.2. Scope

This paper investigates how the available literature about GVCs has developed throughout the years and what impact could events, such as the Covid-19, have on the GVC. Initially, our research scope was focused on the availability of literature within the past 10 years. After investigating the availability, it was decided that an open timeline will be a more suitable option because the majority of the literature was focused on the management of such chains rather than the understanding of them. Therefore, the two main events in the timeline are the Financial Crisis in 2008 and the Covid-19 Pandemic. The scope and structure involve around 3 separate matrices, which enable a division and an establishment of an overview in the periods before the Financial crisis from 1994 to 2007, after the financial crisis 2008-2018 and during Covid-19 2019-2020.

The time frame starts in 1994 with Gereffi and Korzeniewicz's *Commodity Chains and Global Capitalism* (1994) (Gibbon et al., 2008), which was found as one of the key readings, as it is highly cited and referred to. Therefore, it makes sense for the first matrix to be focused on the timeline before the Financial Crisis, which will help establish a clear overview of the literature available as a stepping stone for further research. The second matrix is mainly focused on the period after the 2008 Financial crisis and just before the 2019 Covid pandemic. This division of the time will help establish if there are any drastic changes within the development of literature or the viewpoints of authors since it is easier to pinpoint why such changes occurred. The last matrix focuses on the period during the Covid-19, where the main goal is to see how this event influences research literature and examine what the occurring and ongoing changes are. The aim is to see if the two events are in a way correlated, or whether the pandemic "helps" speed up the changes after the financial crisis.

Ultimately, in our last matrix a full overview of the literature will be presented, where the academic texts will be grouped in categories, and their strength, weaknesses and

main gaps of the research will be established. This will enable us to see if there is a gap in the literature and evaluate what would be the possibilities for further research.

### 1.2.1 Tasks and categories.

For task 1, 3 categories are identified: the author and its work, the industry, and finally, the globalisation or deglobalisation processes. The first category presents the different authors and their main claims on their work of global value chains. The category of sectors has been appointed to examine how globalisation or deglobalisation can affect particular industries, as each can experience different consequences. For example, services such as healthcare or tourism can be affected differently than the food or garment industries. Lastly, an analysis of whether the authors argue towards global capitalism, or on the other hand, questions the possibility and effects of deglobalisation.

Task 2 of the matrices looks to identify the methodological process of the author and assesses what the tools used to present the evidence and findings of his/her work were. Their arguments and conclusions will be presented, to create an overview of the development of literature available and later in Matrix 4 Task 3 will be performed, where a correlation and grouping of all the used literature will be presented.

## 2. Literature review

One could argue that identifying the first traces of global markets started with the appearance of the first traces of industrialisation and globalisation. Those international trade possibilities have motivated countries to specialise in production and manufacturing branches fitting their capabilities, which means that specific countries are more capable within the production of specific items or in different stages of production within an industry. The materialising global manufacturing systems, become more dispersed within developed, developing and industrialised countries.

Dicken suggests that the concept of globalisation is a relatively old term that has become a misused concept (Dicken, 2011). He argues that globalisation is not an end-state that is inevitable for countries, but rather a more complex set of processes involving interactions between countries and industries. The processes of global economic change

are the outcome of the actions and interactions between two major actors, namely the transnational corporations and the states (ibid). Thus, Dicken argues that the reshaping of the economic map is driven by the emergence of complex organisational and geographical networks of production, distribution, consumption as well as value creation and location (ibid, Chapter 14). On the other hand, authors such as Thomas Hylland Erikssen (2014, p.1), take on the anthropological perspective of globalisation and how it can be consequently allocated back to the first "Silk Road" which is considered one of the first transnational trading routes (Erikssen, 2014, p.4). From this, it could be seen that the definition of globalisation and other concepts is dependent on the author or perspective they take. In this project, however, no further discussion regarding globalisation will be presented, where the use of the ones above will be utilised.

The development of the GVCs academic literature will be chronologically examined with a focus on tracing the changes and gaps that occur in the different matrices.

### 2.1. Pre-Financial Crisis 1994-2007

This initial period will give an understanding and overview of the starting point and development of GVC literature, where the main authors from the time-span are represented.

One of the first academics to investigate something resembling the current GVC is Gereffi (1994). In his text, he distinguishes two main commodity chains, the buyer-driven and producer-driven, which accordingly are representatives of the different modes of organising an international industry. Gereffi argues that those chains are governed by private companies (economic agents) as well as by the state's rules and laws in both the consuming country and the producing country (ibid).

The author is focused on one of the main concepts in GVC namely governance, which is referring to the correlation between the buyers, sellers, producers, suppliers and firms that influence the activities that are involved in the process of bringing a product. The concept of governance concentrates on the power and control over the GVC, where one actor can set parameters, for the rest to follow. Gereffi (1994) makes the division and



comparison between the two distinct types of governance structures in the global commodity chains that formed in the past decades, producer-driven (PD) and buyer-driven (BD) chains. He suggests that the PD is seen in industries in which transnational corporations or other huge enterprises are in control of the production line. Those industries and thus chains have a transactional geographical spread and international subcontracting tendencies, where the control of the whole production is in the hands of the headquarter of the transnational cooperation in charge (ibid).

On the contrary, the BD chains are more likely seen in industries where brand-name, retailers and trading companies play the main role. Gereffi (1994) argues that BD chains tend to have decentralised production in several countries, which were primarily located in the Third World. Gereffi (1994) argues that the difference between those two commodity chains is hidden in the distinction of mass production and flexibility. Mass production is falling under the PD where the demand is high, and buyers are, in a way discriminated against. Flexibility is seen as a factor of the BD because it is seen in retail industries and the way they reflect the demographic shifts and organisational imperatives (ibid, p.99).

In the 21st century, where companies are focused on cutting costs and mass producing, Saskia Sassen argues that there are several challenges: increasing development of cities, the international migration of people, the internationalisation and globalisation of finances and the increasing resource allocation (Sassen, 1998). She suggests that the globalisation did not prompt decentralisation and de-urbanisation but rather the opposite. Similarly, to Gereffi's (1994) Buyer-driven commodity chains, Sassen points out that the manufacturing and production activities of products have been dispersed to third-world countries. The control and the information flow, and finance for such productions is relocated into key cities and lead firms, which is creating the reality of Global City (ibid, p.3). The globalisation aspect is connected to the increasing service economy and the information society, where it is argued that those global cities are correlated into units in the world economic system.

A different research of GVC comes from Humphrey and Schmitz. Similarly, as Gereffi (1994), they focus on governance. However, they look at it from the perspective of upgrading and the industrial clusters that have formed in GVC. Humphrey et al. (2000), investigate the correlation between GVC governance and the local cluster governance. They focus on the interaction of local and the global in the industrial cluster when it comes to developing countries (ibid).

They suggest that the majority of the products coming from developing country clusters are involved in the global trade and thus are further showcasing a rising concentration of the global trades and retailing being left in the hands of the transnational companies (Humphrey et al., 2000 p3). Accordingly, those companies are in charge of the coordination of the chains and the connection between the producers (developing countries) and the market, which is in correspondence with the research made by Sassen (1998) (ibid).

Humphrey et al. (2000) argue that there are two central concepts to GVC, namely the governance and the upgrading. Upgrading occurs when a firm is having competitive pressure, which means that they either have to find a way to be more efficient or come up with new activities. Based on this, the authors identify 4 main types of coordination of economic activities, the arm's length market relations, networks, quasi-hierarchy and the hierarchy. Those tend to be what they consider as the forms of private governance (ibid). On the other hand, public governance is distributed through the use of governmental agencies. The authors, however, establish a third category of governance which is a hybrid version of public-private. This category includes business associations, technological centres and groups of business leaders combined with the governmental agencies (ibid).

In their literature review, they divide the available research into two categories: the advantages of local-level cooperation and the second GVC with emphasis on the cooperation of firms in developed and developing countries. Humphrey and Shmitz (2000) establish a gap within those segments of literature where both are focused on governance and its importance to upgrading but rather ignore the interactions between

the local and global governance and their implication on the upgrading processes. The local cluster of literature seemed to be narrowed to the need for such improvement of cooperation and the local level of governance where they do not focus on the external linkages and relationships. In this type of literature, even resources and upgradings seem to be coming out of the local sphere, where the external world is only seen as the 'market pressing' for competitiveness. Contrastingly the GVC literature is emphasising on the external world, and the locality is highly unrecognised. The authors establish that this section of literature tends to forget the importance of business associations, and the local governance is underexplored. In contrast, the interaction between firms and their governance is emphasised (ibid).

Additionally, Gereffi (2001) notes that technological development and mainly the internet is quite relevant for the governance of GVC. According to him, the inter-firm division of labour is shaped by the internet, and as such, it has an impact on the participants which have to get used to and develop their activities. He argues that the GVC are not to be seen as static, but rather the shift in power, actors and global industries should be further examined with a historical perspective. Gereffi established a new shift emerging in the face of electronic commerce. He suggests that at the beginning of the 21st century, the development of business and the implementation of electronic information technology brings a change in the organisation of businesses, markets and governance regulations. Consequently, this impacts the dynamics of the GVC's, where the two main types of e-commerce to be seen are the Business-to-business (B2B) and Business-to-consumer (B2C) (Gereffi, 2001).

The author argues that the internet has the capabilities of transforming his previously established PD and BD chains because it creates markets of scales where the level of efficiency is higher than before as well as the possibility of having a pull business strategy, where inventory and shipping of products are happening only when a consumer demands it. Thus, there is a shift from push to a more pull orientation as a trend in many industries (ibid).

Gereffi (2001) concludes that there are 3 main scenarios that the internet can impact the GVC, where the first one is that the development of the internet will lead to

infomediary-based value chains which will be able to input multiple organisational drivers. The second possible scenario he sees is that the internet will make all industries buyer-driven where consumer-orientation will be a competitive factor for both manufacturers and retailers. The last and most likely scenario is that the internet will be integrated within the business practices of manufacturers, retailers and marketers for both the B2B and the B2C transactions. What the author suggests is that the internet will upgrade the efficiency of the economy, where the major leaders in both PD and BD value chains will incorporate e-commerce within their daily activities and business strategies. This, according to Gereffi, will lead to the most powerful companies overtaking the internet and thus, forcing their rivals and suppliers to adapt to the changes (ibid).

In their paper, Humphrey and Schmitz are arguing that liberalisation as such should bring advantages to developing countries meaning that they must be able to export the production from which they will be able to gain competitive advantage. According to the text, the trade within the labour-intensive production is highly organised by global buyers, who may be representatives of big brand-name companies. Those markets and their development are highly dependent on the entrance of such lead firms that are situated in the developing markets (Humphrey et al., 2001).

The majority of the trade that is conducted in that global economy is mainly based on transactions between companies. However, the authors suggest that it is less discussed that trades could also be organised in networks that could be legally independent. Humphrey et al., use the concept of governance by which they understand the enforcement of parameters from one firm to another in the GVC. Further on they look into what is understood by the governance of the GVC, and they establish 5 parameters: what is to be produced, the definition of the production process, when it is to be produced, how much is to be produced and finally the costs of the production. Those are accordingly the parameters that one company sets upon another and express governance over it (Humphrey et al., 2001).

Further, they discuss the division made by Gereffi (1994) of PD and BD value chains, where they argue that the 5 parameters discussed above are set by the firm in control of the product when it comes to the PD. When discussing BD GVC, the parameters are

set by the end retailers and brand name organisations (Humphrey et al., 2001, p. 22). Lastly, they suggest a possible influence upon those parameters, if the governance is set by an external participant, such as governmental agencies and international organisations in charge of manufacturing and product design activities. Some of those activities could be food-safety regulations, safety norms when it comes to children toys as well as control over hazardous substances used in many production lines (ibid).

In their academic research the authors conclude that even though the non-financial factors are playing a huge role in the global markets, there is a new tendency over the competition when it comes to price in the labour-intensive GVC of developing countries. This led them to the adding of the 5th parameter in their analysis as well as the consideration of the governance coming from external participants (Humphrey et al., 2001).

As a continuation of their previous research, Humphrey and Schmitz (2002) argue that the firms located in developing countries, and more commonly within the Labour-intensive manufacturing, are under enormous pressure to improve their performance and therefore, increase their competitiveness. The logical response of such firms, according to Humphrey et al. (2002), is to upgrade by creating better products or find a more efficient way of production. The authors argue that in the current globalising world economy, the way to achieve competitive advantage is highly localised and based on tacit knowledge. They look into the previous research done by Gereffi (1994,2001) and focus on how the local linkages and the global linkages correlate (Humphrey et al., 2002).

Humphrey et al. (2002), suggest that the importance of clusters and their recognition puts the economic geography as the focus of the development and GVC's. However, in their research, they argue that the focus on the quality of the local linkages between firms has led to the forsake of the global linkages. This is in agreement with the research done by Gereffi (2001). The GVC approach they use has emphasised the fact that the clustered producers rarely sell their products in the open markets. This, according to the authors, is because the networks of chains connecting the local producers with the global retailers are mainly governed by huge and powerful lead firms, which has an impact on the local upgrading. By the use of their previous research Humphrey et al.,

emphasise on what they call quasi-hierarchy, in which the global buyers are the ones who regulate the product parameters in case of determining the product design (Humphrey et al., 2000). This quasi-hierarchy governance of the GVC is focused on the enhanced and speed upgrading of the local producers, which respectively means that for firms with such governance it would be harder to upgrade to higher-value activities (Humphrey et al., 2002).

In the late beginning of 2000, there tends to be a shift in academic research, where the academics are not as much narrowed on the governance of GVC. Instead, they expand the different correlations between activities. One example of that is the work of Gereffi et al. (2005) who theorised about the coordination and control of the global-scale production systems as well as their complexity. In their research in case of being able to look into the inter-firm relationships, they developed a typology of GVC governance by including 3 supply chain variables: the complexity of the transaction, codifiability of transactions and lastly the capabilities of the supply bases. For each of the three variables, they prescribed high or low values and identified a typology within the GVC governance. With this typology, Gereffi et al. (2005) identified different types of GVC governance, Markets, Modular Value Chains, Relational Value Chains, Captive Value Chains and Hierarchy.

Gereffi et al. (2005) GVC framework is focused on the inter-firm linkages and the power of who is regulating the GVC coordination when it comes to buyers and suppliers. They look into both ends of the Value Chain and the according to actors. In the upstream end, they explore the suppliers and how the components and equipment can increase the power, by looking into the personal computer industry in the face of Intel and Microsoft. On the other hand, when focusing on the downstream, the authors argue that the knowledge of the end-users is playing a great role in the attributes and innovative approach to the products and services that are involved in the GVC (ibid).

In their paper, Gereffi et al. (2005). discuss the importance of the interconnectedness of geographically clustered organisations, were based on Maskell and Malmberg 1999 and Storper 1995, they argue that those agglomerations are the locations where the

majority of the GVC could be seen. Looking into further literature, Gereffi et al. suggest that many of the geographically other activities tend to be moved abroad as they are influenced by foreign investments and the fact that national models for projects are going abroad (ibid).

From their research of industries such as the electronics, apparel and household goods located in the US and EU Gereffi et al. conclude that there is the tendency of encouraging a geographical fragmentation in the GVC. However, there is certainly political pressure in both developed and developing countries to, in a way, gain or keep that production at home. The access to those developing countries and their production capabilities, however, becomes more dependent on the participation of firms in the Global Production Networks (Gereffi et al. 2005).

Similarly, to the GVC perspective so far, global offshore outsourcing presents some of the main characteristics of globalisation (Gereffi, 2005). Where some of the processes involve two main phenomena: outsourcing and making or buying. Outsourcing is considered as a part of any business, according to Gereffi, where a firm needs to decide if they want to produce something in the house or buy it from another firm. Offshoring, on the other hand, refers to the movement of goods and services from home locations overseas. Those specific activities and moves can accordingly be carried out by transnational or local suppliers or by the firm itself (Gereffi, 2005, p.4). The outsourcing field showcases similar interdependence between the developing and developed countries. However, the focus is on jobs, salaries, and the distribution of skill sets around the world. Moreover, according to Gereffi (2005), the outsourcing perspective navigates around the organisation of economic activities between the organisation and country's boundaries, where the focus is put on how and where is production and employment created. This last point of Gereffi (2005), is the main difference between the focus of GVC and Global Outsourcing, wherein GVC there is no consideration about which part of the VC creates the value or job opportunities (ibid).

Gereffi (2005) suggests that global outsourcing has led to the conversation about the benefits vs cost of the globalisation processes when it comes to the developing

countries. Where on side argues that those processes are beneficial because they create job opportunities, whereas other claims that they are the sole reason for countries to become poor as developing countries are competing with each other to give the lowest production costs to big transnational companies (Kaplinsky, 2000 in Gereffi, 2005).

According to Gereffi (2005) however, global outsourcing does not correspond to the full transfer of all economic activities into the developing countries, he acknowledges that there is a significant set of activities that remain located in advanced countries even though they are in tight connection with activities from other locations. This leads to what he calls a cross-border linkage between different firms and economies (Gereffi,2005, p.2). Those different linkages accordingly are presented by the offshore outsourcing phenomena, which was spread in the late '70s (ibid, p.4).

From the GVC perspective, it is visible that the industrial structures of developed countries are closely linked with the different networks of suppliers, producers and workers in different parts of the world. According to Gereffi (2005), due to globalisation currently, the majority of the workforce of GVC is now seen in those developing countries. He further argues that there is a trend moving towards industrial convergence due to the First World deindustrialisation. Moreover, he focuses on the shift of the manufacturing processes and jobs from the developed economies to the developing countries, mainly due to the lower-costs production sites. These offshoring processes and movements of production are seen as key factors for Third World industrialisation (ibid, p.6).

From Matrix 1, below, we could see that the majority of the literature within the time period from 1994 until 2007 is highly focused on the governance of GVC, where each of the texts in a way creates their own typology or framework of the subject area. Even though they tend to argue that the research represents a global view of the subject, the researchers are heavily focused on the developing countries with a close look into the labour-intensive industries. We can conclude that the majority of the literature presented in Matrix 1 and the text above is trying to co-relate to previous researches. However, there is a visible dependency of developing different frameworks, typologies



or theories that are not unified and give multiple ways of approaching the literature. Furthermore, we should be taken under consideration that the diverse concepts and explanations of power over the GVC, governance and globalisation are seen in different ways by each of the authors.

Lastly, one of the main lacks seen in this literature is the absence of consideration of the service sector, where the majority of the academic texts are focused on the reduction of costs. So far, the GVC literature has not presented the value creation as a process within the chains, where none of the used texts gives an overview of where such value creation processes are implemented or seen.

In conclusion, from the first time period, we can see that the majority of literature is focused on the development of different frameworks and typologies for understanding and mapping the governance of GVC, where the authors tend to build upon their own understandings. Even though there was a shift, where the literature moved from GCC to GVC, all the academic texts seem to agree with the tendencies of Globalisation and fragmentation of the production and GVC.

Pre-Financial crisis 1994-2007	Task 1			Task 2		Gaps
	Title and author	Industries	Globalisation/ Deglobalisation	Methodology	Argumentation	
	The organisation of Buyer-Driven Global commodity Chains: How USA Retailers shape overseas Production Networks 1994 by G.Gereffi	US retail and apparel sector	Globalisation and internationalisation BD- have decentralised production mainly within the third world. Mass production -PD Flexibility BD	Uses supporting arguments from industries with examples of GAP, Nike Rebook sales, return on revenue and net income in past years etc.	The control of those value chains is divided between the private companies as well as by the state in the producer and consumer market. PD- in industries in which there are transnational organisations are in control. Mainly seen in technological and computer industries BD- brand name companies and retailers are the focus, mainly seen in labour-intensive and consumer goods sectors such as clothing	Does not consider services
	Globalisation and Its Discontents. 1998 by Sassen Saskia	No specific industry more general understanding	Globalisation The globalisation aspect is connected to the increase of service economy		Companies are focused on cutting costs and mass producing Manufacturing and production activities are dispersed in third world countries. Control over information flow is located in big cities	Focus is put too much on cutting costs rather than the value creation. As well no consideration of services
	Governance and Upgrading: Linking Industrial Cluster and Global Value Chain. 2000 by Humphrey and Shmitz	No specific industry but rather looking into the overall industrial clusters of production	Interaction between the local and the global	Two main concepts the governance and the upgrading are used to support the arguments	Interaction between the local level of production and the global level of decision making of transnational companies The majority of the production are coming from developing countries. Transnational companies are in charge of the coordination of the chains.	The local cluster does not take into consideration the external relationships of the GVC. The GVC literature is focused on the external world. There is not a nice correlation between the two types of literature
	Beyond the Producer-driven/buyer-driven Dichotomy: The evolution of Global Value Chains in the Internet Era, 2001 by G.Gereffi	Focus is not put on a specific industry but rather on the internet as development for GVC and Businesses (electronic commerce)	Globalisation	The new shift and the emerging of electronic commerce create the division of B2B and B2C	GCV are not static, but rather, there is a shift in power, actors, industries. The internet creates a market of scales, where there is a shift from more push to a pull production	The paper doesn't work with specific industry nor it considers the service department.
	Governance in Global Value Chains. 2001 by .Humphrey and Schmitz	Transactions between subsidiaries and transnational companies	Globalisation	Uses other academic literature to review the subject of governance. Where based on that, a new typology is created	The concept of governance as a central part of the GVC. Governance as control along the GVC	No consideration of services and only focused on overall understanding with no specific adaptation to an industry

Figure 1. Matrix 1 Pre-Financial Crisis

How Does Insertion in Global Value Chains affect Upgrading in Industrial Clusters 2002 by Humphrey, and Schmitz	Industrial clusters in developing countries labour-intensive export industries such as footwear and garments		Comparison/connections between two types of literature. Where one considers only the local linkages and the other is focused on the global perspective. Based on that and their previous work, they create a new typology.	The concept of upgrading with the GVC, where the producers were facing global buyers, which had an influence on the local upgrading processes. the recognition of clusters and upgrading has put the economic geography back at the centre of GVC	The paper is focused on the local production of goods; however, it does not consider the services.
The governance of Global Value Chains 2005 by G.Gereffi, J.Humphrey and T. Sturgeon	Bicycles, apparel, horticulture and electronics	Geographical fragmentation of GVC	Builds a theoretical framework to explain the concept of governance in GVC, based on the previously available research.	Argues towards dynamic and overlapping GVC governance. The text focuses on the linkages in the inter-firm, as well as the power that is regulatory to the GVC coordination. the text acknowledged actors from both ends of the GVC (suppliers and buyers). Key finding in the fact that the access to developed country markets is dependent on the participation in the global production networks	Lack of consideration of services
An Overview of the contemporary global labour market. In: The new Offshoring of jobs and global development., 2005 by G. Gereffi	Focused on the jobs, salaries and skills around the world rather than a specific industry			Interdependence between developing and developed countries. Global outsourcing leads to the conversation between benefits vs. costs. Due to globalisation the majority of the workforce is now located in the developing countries.	

Figure 2. Continuation of Matrix 1 Pre-Financial Crisis

## 2.2. Financial Crisis 2008-2018

Firms might have sought to diminish costs by producing with cheaper labour abroad; however, factors such as the difficulties for controlling from afar, or the automatisisation, can drive bringing production back home (Ellram et al., 2013, in Livesey, 2018, p.180).

According to Gibon, Bair and Ponte (2008), all the theoretical concepts in the governance of GVC and its literature have been uneven and diverse until this period of 2008 (matrix 1), and they observe the possibilities of unifying them into a framework. They do so by reviewing the previous literature, identifying the most relevant theoretical and methodological discussions in GVC (ibid).

Pieterse (2012) believes that events and situations caused processes "acceleration", and "deceleration" of globalisation. Erikssen (2014) agrees with Hegel's early 19th-century idea that globalisation can also be established as the individuals' awareness of this interconnection between states in societies. In this time frame, Bude and Dürrschmidt (2010) suggest anthropological questions that may oppose globalisation. One of their examples is the rise in lack of individuals' feelings of belonging to a place, and their relations among societies (ibid). Moreover, they question why is it that globalisation seems to be stagnant or unable to keep up? (ibid). By reviewing different research works, and statistics on migration, the authors, allocate a paradox when comparing the small number of people moving across borders in the age of "migration dreams" of a globalised world (Beck-Gernsheim, 2007; Düvell, 2006; in Bude and Bürsmichdt, 2010, pp.845-846). They address this by identifying current trends of deglobalisation such as the 9/11 terror attack outcome against everything foreign, or the political movements opposing undesired migrants in growing mobility across international borders (Shamir, 2005; Salter, 2009; in Bude and Bürsmichdt, 2010, p.846). Taylor et al. (2007, in Bude and Bürsmichdt, 2010, p.486) see that the technological advancements that allow us to travel across nations easily have also become a burden and a social cost, for those moving abroad. Bude and Dürrsmitchd, seek to observe the small micro-level of the sociological impact of globalisation in the personal life and relations of the individual. They argue that despite the high connectivity thanks to the technological advancements in communication, there is a certain social disconnection between those living abroad

and leaving family and friends behind As Ley (2004) states it (in Bude and Dürrsmith p.490), the impact on the personal life of the individual who crosses borders for pursuing other life goals is something that is deeply ignored in the literature and theory of globalisation.

According to Horne and Nadvi (2017, p.231), the growth of neo-nationalism and protectionist economies are also contributing to the hesitation towards multilateral agreements between nations. Livesey (2016), speaks on automatisisation of labour, and Horne and Nadvi (2017, p.231) see how these technological advancements can move certain VCs and PNs activities back home, reshoring. By analysing empirical data on the dynamics of global trade, Horne and Nadvi (2017) allocate what they refer to as a polycentral, meaning different centres of trade across the globe. It is no longer the dominance of the Global North; the researchers look at the growth of the Global South players by connecting with strong multinational firms, and trading South-South. Moreover, they believe further research needs to be done to understand the influence of institutions and the acting of regional and local markets, and how they play a key role in the changing, and reshaping of the concept of Value Chains and Production Networks (Horne and Nadvi, 2017, p.231).

Gibbon et al. (2008) refer to Gereffi's (1994) division of GVC governance into PD and BD, as explained in the previous period of this paper. At the beginning of the 2000s, this typology was criticised by Clancy, and Henderson et al. (1998, and 2002, in Gibbon et al., 2008, p. 321) claiming that it was too limited and unclear because it did not seize all the other possible types. For example, "bi-polar" governance by Fold (2002, in Gibbon et al., 2008, p.321), which looks at how different firms can participate in one activity of the chain, or technology-driven chains in research-intensive industries according to O' Riain (2004, in Gibbon et al., 2008, p.321). Another criticism to this dichotomy was that it was not only the production activity being outsourced by, other activities such as assembly and the firm did more than just being the buyer, they were also the retailer for example (Fold, 2001; Gibbon, 2001; Ponte, 2002; in Gibbon et al., 2008, p. 321). It was also further established that GVCs are formed by different separated components and not just uninformed entities (Gibbon et al., 2008).

Livesey differentiates between some elements of decisions in firms that can alter the structure of the GVCs (Livesey, 2018, p.181). He considers that advancements and possible technological updates will influence the capabilities of volume and specification in production. The ideal would be the creation of what he refers to as "ultra-flexible" production lines, meaning lines that would allow for quick adaptation to changes in small time frames and the possibility of producing a wide range of specialised products (Livesey, 2018). He continues by shedding light on the processes of automatisisation in production lines, which reduce the need for human labour. Therefore, the relocation of production based on the cost of wages becomes less crucial for firms (ibid). On this stance, he introduces an example of how China, South Korea and Japan, followed by the USA and Germany have the largest shares in the shipping of industrial robots, a trend that has had continuous growth since 2008; however, Livesey (2008) argues that it is unclear whether the use of these industrial robots is destined for the production of goods for domestic or foreign markets.

According to Laurens et al. (2018), the challenges of the internationalisation of Research and Development (R&D) activities have changed. Many multinational corporations (MNCs) carry other multiple activities offshore, thanks to the development of Information, Communication Technologies across the globe, and the reductions on the costs of shipping (ibid), which contributes to higher globalisation. The reason behind the internationalisation of technological processes lays behind the goal of companies to adapt their goods to the local markets and to discover and accommodate new technologies that can increase the firm competences (ibid). The authors describe how Friedman (2005, as cited by Laurens et al., 2018 p.19) sees through these changes how the world becomes "flatter", and the "end of distance conjecture". On the other hand, they introduce opposing thoughts from other authors (McCann, 2008; Florida, 2005; Iammarino and McCann, 2013; as cited in Laurens et al. 2018 p.19) who see the world becoming more uneven as not all nations and firms count with the same advancement in technologies and communication system.

Furthermore, Livesey (2018) moves towards the impacts of consumers' influence in the operations of the firms. They are the ones setting the demands and expectations for the products or services. The current consumer wants things available to them much faster,

which would imply changes in the production chain to fulfil this request (Ibid). Add on to this new type of consumer is their involvement and interest in the way a product is produced to ensure sustainable goods, and reduce waste (consumers demanding circular economies) and polluting emissions found across all activities of the production networks, which might lead to shorter trading distances (ibid).

Livesey looks for answers in whether the globe is experiencing "deglobalisation" processes. Deglobalization can be understood as the opposite phenomenon of globalisation, with the loss of interconnections and share of global capital (Livesey, 2018). According to International Political Economy Harvard professor, Dani Rodrik (2016), the no longer quick and fruitful industrialisation in Asian countries, the drop in the level of trust in governments, and the delicate side effects of globalisation such as immigration and the high interconnectedness and dependent economy between nations, are some key factors that are pushing towards deglobalisation processes, and the rethinking of GVC's.

Laurens et al. (2008) also identify a trend of deglobalisation, especially in European MNCs, through their quantitative and qualitative research of the end of internationalisation in the mid-1990s and localisation of R&D processes in MNCs. Nevertheless, they also recognise big firms from US and Asian countries are continuously but moderately augmenting their globalisation of technological processes, as mentioned above (Laurens et al., 2015, in Laurens et al., 2018, p.31).

Since 2008, as a repercussion of the global financial crisis, the world trade has slowed down. Possibly resulting in a physical deglobalisation where the final good is closer to the consumer, rather than the transnational presence of big volumes of products. However, he sees that predicting these effects by looking primary at the GDP index might not show when or how firms are deciding on locating their suppliers and productions until the changes have already happened (Livesey, 2018).

Livesey distinguishes between "physical" and "non-physical" aspects of the processes of integration in globalisation (Livesey, 2018, p. 180). He relates to the work of Czaika and de Hass (2015), associating migration movements, and products trading as clear examples of physical aspects of globalisation (Livesey, 2018, p.180). For the "non-

physical" aspects, the author looks toward the growth of communications, the financial interconnectedness between nations, and the coexisting and blending of cultures, presented in the works of Palm (2002), Kose et al., (2009), and Conversi, (2010) respectively (Livesey, 2018, p.180). He believes that the "made in the world" products and the big amount they account for in transnational trading, which he considers the physical aspect of global integration, has spanned changes in the "non-physical" aspects, such as migration. This translates to the non-physical aspects of globalisation being directly affected by any changes in the regionalisation or localisation of GVCs activities.

Livesey (2018) argues that there is a visible polarisation between the growth of national capitalism as exemplified by the political inclinations of the US President Donald Trump but at the same time the current growth of hyper globalisation and global Capitalism (ibid). Livesey (2018) discusses the implications of a possible physical globalisation in the global capitalist economy. Yet Laurens et al. (2018) inquire the necessity of further research and longer observation periods for models that can determine how locational strategies work along with global trends, and for a better understanding of the division of R&D processes inland or abroad. However, they believe the trading regulations at different levels of the organisation can also imply different levels of internationalisation, and the communication between the firm needs to be consolidated (Gammeltoft, 2006, in Laurens et al., 2018, p.31).

We can identify levels, trends and patterns of globalisation or deglobalisation associated with economic activities, society or different industries. This research sees these levels can be dynamic and not necessarily a straight forward or linear process in every aspect of the global economy or global society. Political landscapes, and social movements (Livesey, 2018), down to the individual behaviour (Bude and Dürssmitz, 2010) can also influence these patterns or levels of globalisation/deglobalisation. Horne and Nadvi (2017), and Livesey (2018) see two key factors on the new changing governance of GVCs. From offshoring to production for allocating cheaper labour to the appearance of automatisisation, which allows firms to bring back production inland and no longer competition of labour in production in developing countries is no longer relevant. The political landscape and the national economy protection sways have been influencing the level of transnational agreements since the Global Financial Crisis in 2008. Although,



the consumers' voice and environmental concerns in these years grow stronger, establishing demands and requirements for the way multinational firms produce and operate. There is a sense of unity living in a global world, where countries and societies are dependent and interconnected beyond borders. This unity is at risk when faced with threats (Erikssen 2014) such a global pandemic, in the case of Covid-19. Following in this paper, we will further elaborate on how Covid-19 is affecting and reshaping the GVC and the trade and labour across borders.

Financial crisis	Task 1			Task 2		Gaps
	Title and author	Industries	Globalisation/ Deglobalisation	Methodology	Argumentation	
2008-2019	P.Gibbon, J. Bair and S.Ponte, 2008 - "Governing Global Value Chains: an Introduction 2008	Multinationals and GVC governance. Looks at the participation of the external factors such as institutions	Towards globalisation	The authors review the main interpretations of the governance of GVCs. Governance as driving, coordination and normalization. They do not assess other fields of research in GVC literature but acknowledge the existence of the variations in the governance.	They seek to study the possibility of unifying the GVC theory under one dynamic paradigm.	
	Bude and Dürrsmith 2010 - "What's wrong with globalization? Contra 'flow speak' - towards an existential turn in the theory of globalization"	Social Aspect? & flow speaks	Argues that globalisation creates a deglobalisation feeling in the sense of the personal lives. Yet it can also be disembedding but also remembering and new understanding of the social norm. Yet against philosophical grounds of human nature.	Literature Review. They do so by taking the work of authors such as Guiddens (2003), Kennedy, Ley (2004), Alborw (2008), Schütz (1964)	Social Impacts of globalisation in the individual's personal life. Despite a highly connected world, space still matters.	Focus is put too much on cutting costs rather than the value creation. As well no consideration of services

Figure 3. Matrix 2 Financial Crisis

S. Ponte, and T. Sturgeon, 2014 - "Explaining Governance in Global Value Chains: A Modular Theory-Building Effort".	GVCs	Towards globalisation, speaks on global economy and how can GVCs adapt themselves according to macro influences	Reviews of previous two theories on GVC: linking and conventions	They propose a "modular" theory of GVC governance" to better connect theories and adapt them according to macro level influences.	This paper misses on looking towards the micro/meso factors and the influence of institutions, and societies.
Finbarr Livesey 2018 "Unpacking the possibilities of deglobalisation".	Production Sector. Companies and their global value chains	Movements of deglobalisation, and times of hyper globalization	Use of previous literature on GVC and primary data	Since the GFC the globe has experienced processes of deglobalisation: new production technologies, economic nationalism in politics and high consumer demands. The requirements for fast availability of products, and the environmental concerns also contribute to the shortening of GVC	We can see know that there are more factors contributing to the acceleration of a possible deglobalisation: such as customers preferring to buy locally, or the case of a global pandemic
Laurens, P., Le Bas, C., Schoen, A. and Larédo, P., 2018 - "Internationalisation of European MNCs R&D: "deglobalisation" and evolution of the locational strategies".	Multi National Companies based in Europe, with a focus on the offshoring or home centralisation of Research and Development activities.	They present the different factors gathered from literature that can push firms to prefer home centralised activities vs. internationalisation, such as the difficulties of distributing knowledge across the chain.	Quantitative and qualitative in the localisation of R&D processes	European MCNs are reshoring innovation research, while US and Asia are still at the starting point of implementing transnational technological advancements	Further reading is necessary for understanding the processes of MNCs in times of deglobalisation. In the D&R. What are other factors that can play a key role on this? What would be the innovation required in the future?
Horner, R. and Nadvi, K., 2017. "Global value chains and the rise of the Global South: unpacking twenty-first century polycentric trade"	Value Chains, and Production Network reshaping the geographical trade, into a polycentric global economy.	The paper highlights the regional and domestic peculiarities of the Value Chain. Protectionism laws, and the neo-nationalism promote bilateral agreements, which added onto robotic advancements can mean the reshoring of activities reshape GVCs and GPNs.	The authors analyse empirical data from global trade dynamics.	The growth of polycentric global trade. The rise of the eminent influence from the Global South and the South-South trade and the governance of Value Chains and Production Networks, and their final end in different markets: global, regional and local.	The difference between the expectations and current state in the development of global trade could mean looking into new ways of defining Value Chains and Production Networks

Figure 4. Continuation of Matrix 2 Financial Crisis

### 2.3. Covid 2019-2020

The pandemic has shaken up the GVC's and challenged the supply meeting the demand. Matrix 3, will analyse what the pandemic means from an economic point of view as well as, analysis of how the pandemic has affected the GVCs and the future implications.

In their article, Tauseef et al., argue that health diseases tend to have an impact and cause disruption not only in the global health sector but in the socioeconomic sphere too (Tauseef et al., 2020). The spread of the COVID-19 has been fast and hard to control despite the lockdowns and strict regulations imposed by the governments which have resulted in isolations and quarantine that challenged the everyday activities such as grocery shopping, transportation, social activities, as well as the health and wellbeing of the people (ibid).

Tauseef et al., argue that the COVID-19 cases outside its country of origin, China, tend to be related to the free movement and travel of infected people between countries and continents. The authors claim that there is an alarming necessity for collaboration on both global and regional level in order to limit and cease the spread of the virus and its effects and consequences in both, the socioeconomic and health sector. In this article, the authors present. The challenges to the population and government imposed by the restrictions made because of the COVID-19 pandemic (ibid). It could be argued that since we still are in ongoing global health and economic crisis, it is not clear who will be the "losers" and the "winners" of this global crisis. Since some countries in South-East Asia do not have the capacity to diagnose, take care of those who are highly affected, or track the virus, are subject to close examination and testing at China's airports. This tends to have an impact and pressure on China's airports (ibid). Moreover, business travel and the movement of labour and goods have been forbidden. The lockdowns have imposed restrictions for the free movement of the government and private employees as well as the customers going to work (ibid). The vulnerable sectors such as restaurant businesses, markets, shops, churches, mosques, cinemas, hotels, culture centres such as sightseeing sites and museums tend to experience a rapid impact. However, the sectors, industries and companies that are defined as the "vulnerable" ones are the

"currently vulnerable ones" because the result of the pandemic and the aftermath are still yet to be seen (ibid).

The lack of knowledge about the virus, in the beginning, the scare of employees due to lockdowns made it difficult for businesses operating off the cash flow. However, the governments have come up with different tackling strategies and compensations for employees who were not able to work due to the COVID-19 pandemic. There has been a big impact on the airline industry from the pandemic, due to the cancellation of numerous flights (ibid).

By declaring the COVID-19 pandemic for big "health emergency" on a global level, it harmed the world's economy as a whole. The international organisations have acted upon the COVID-19 crisis and have proposed financial help for the countries that are in need. Moreover, according to IMF's predictions and forecasts, the government's borrowing worldwide will grow from 3,7% of GDP in 2019 up to 9,9% in 2020. Therefore, it could be argued that the COVID-19 crisis has also become an economic and global trade crisis. Its rapid spread has also influenced global affairs and international relations since some countries blamed the rapid spread on each other (ibid).

Gereffi argues that the restrictions, closing borders and confusing ongoing changes in the policies due to COVID-19 have shifted the focus on the supply chain shortages of products and equipment needed to combat the pandemic (Gereffi, 2020). Demand spikes, supply shortages and the policy confusion tend to expose the vulnerability of the GVCs. He argues that because the GVCs have specialised divisions and locations for the labour, supplies as well as the innovation and know-how of the final products, has resulted in products being delayed on the "shelf". He takes the example and the case of medical supplies during the pandemic (ibid).

Gereffi (2020) argues that the different components of a product (he takes the example of the medical supplies) are located in different places in the world. Moreover, COVID-19 has shaken up the GVCs because the state policies and the pressure to minimise the spread of the pandemic has shown that the international production networks are quite vulnerable. After all, the production process is dependent on multiple producers who are based in different countries and continents. With the restriction that came after

COVID-19, the export and import of goods have been highly affected. This tends to cause delays and even blockage in export and import. Moreover, in the case of the medical supplies, due to the special know-how for producing some of the supplies such, the production could not be moved or spread outside China. Gereffi argues that it is not only expensive but also time-consuming to share the know-how and expertise as well as the machinery for the development of the special materials. This is not only the case for the medical supplies but also the case for different products and industries as well (ibid).

Value chains have become not only global in the past few decades but also highly dependent on each other in order to finalise a single product (ibid). Also, the value chains have become highly dependent on the biggest export economies such as China, together with the Just In Time (JIT) model, which has its pros - low cost and reduced inventory. In other words, the globalised world, which benefits from the big global network of producing goods, has made the value chain fragile. In his article Gereffi (2020) comes to a conclusion that in order to achieve resilience in the GVC's, global companies have to diversify their supply chain in a few ways so that they can scale the economies, innovate and cut the costs (ibid).

In his academic work, Alain Verbeke suggests that COVID-19 has shaken up the GVCs and has acknowledged the "shock" this pandemic has caused which leads to the predictions on the future shape of the GVCs (Verbeke 2020). He acknowledges the effect on the international linkages and the large multinational enterprises, small and medium-sized firms and their supply chain partners. Moreover, the post-pandemic world will call for reassessing what "new normal" will mean. Alain argues that the outcome of the pandemic would be the unavoidable necessity for the GVCs to become agile, in order to operate under the pressure of the sudden shifts, exogenous shocks and radical changes in the industries and the markets (ibid).

According to Alain, politicians have stressed that the companies have to rethink their approach to outsourcing and their ability to be resilient the same way they were before the pandemic. In addition, he argues that there will be long-term impacts on human resource management. From a research perspective, he argues that the pandemic is likely to stimulate the four research areas on the GVCs (ibid).

The first research area he casts the light on is the "investments in intelligence and contracting safeguards" (ibid). He refers to the challenges that arise when a company operates in an environment that involves high distance in geographic, cultural, economic spheres. The question arises whether the COVID-19 will increase the governance-related investments in intelligence and safeguards which aim would be to reduce bounded rationality and bounded reliability problems and what kind of form these investments will take (ibid). The second research area Alain points out is the "levels of irreversible investments abroad" (ibid). COVID-19 has exposed the vulnerability of the entire sectors as a result of shutdowns and lockdowns as well as the closing of the entire sectors and using the public health emergency as the reason. The public policymakers have proved that they have the "power" to shut down entire sectors of the economy and the GVCs without any warnings or possible negotiations with the parties affected (ibid).

The third research area Alain points out is the "relational contracting with key partners and ex-post governance" (ibid). He argues that the pandemic has exposed the lack of reliability the global institutions and macro-level institutions have when protecting businesses. The Multinational Enterprises (MNEs), might reduce their dependence on these institutions and engage more in a micro-level contracting with crucial partners in their GVCs network which tends to question the balance between the formal and the relational contracting (ibid). The fourth and last research area Alain makes is the "levels of diversification" where he argues that there are two sides in this pandemic (ibid). The "winners" such as the manufacturers, online retailers of the protective equipment and healthcare medical products and the digital / tech service companies. Alain points out that the key testable hypothesis is the lead companies in GVCs and their close partners will get involved in "higher product industry diversification in order to minimise the great consequences of a future global crisis on their core business. Moreover, he points out that the pandemic has exposed the vulnerability of the GVCs to huge disruptions and big crises like this pandemic. He argues that agile GVCs tend to be the best "safeguard" to maintain the economic connection and relationship, which are crucial for the world economy to flourish and not stagnate and sink (ibid).

From Matrix 3, seen below, it can be concluded that it is important to point out that the statements are based on current facts which are based on numbers and figures and depending on what angle and view they are seen from, they can be changed and therefore tend to be quite "manipulative". So, one has to take in consideration that the statements that are made depending on the sources and the source's point of view as well as their assumptions. What they define as being "vulnerable" might not be the case for others and vice versa. Additionally, it also depends on which country's point of view is being discussed. In some countries, certain industries suffer more than others.

During Covid-19 2019-2020	Task 1				Task 2		Gaps
	Title and author	Industries	Globalisation/ Deglobalisation	Possible implications of Covid-19	Methodology	Argumentation	
	Coronavirus Disease 2019 (COVID-19): Pandemic and Economic Impact by Tauseef Ahmad, Haroon, Mukhtiar Baig, Jin Hui	Emphasis are put on the restriction of free movement of labour and goods across countries and continents.	Deglobalization Highlights the state's control over its people and flow of goods	Isolation from the global network and GVCs, avoidance on the interdependence on others	Starts by a detail overview of the emergence of the pandemic, its influence on different sectors and aims to show the "bigger picture" and its influence on the healthcare and economic situation.	Besides the economic and health crisis, the article acknowledges the impact on the global affairs, international relations and global trade.	Does not consider other industry that might be affected. Puts a lot of emphasis on the travel restrictions and movements of goods and labours
	What does the COVID-19 pandemic teach us about global value chains? The case of medical supplies by Gary Gereffi	Takes the example of the medical supplies – production sector for medical equipment	Has a critical view on both globalization and deglobalization		Takes the example of the GVC of the medical supplies and focuses on the high interdependence of the GVC in the production process. It comes with proposal on how to achieve resilient GVC.	Criticizes the globalization which has made the GVCs fragile in times of sudden crises like the pandemic.	It mainly focuses on production of goods and the movement of goods across the GVCs and across countries. Services are only briefly mentioned.
	Will the COVID-19 Pandemic Really Change the Governance of Global Value Chains? By Alain Verbeke	Takes the example of companies and industries that are highly reliable on outsourcing. However, it doesn't focus on 1 specific case	Globalization, how companies should adapt on the more agile way of working	Alain points out that the key testable hypothesis are the lead companies in GVCs, and their close partners will get involved in "higher product industry diversification in order to minimize the great consequences of a future global on their business.	Focuses on the current ongoing situation and data about the impact on the different sectors and proposes four different research areas that have emerged as a consequence of the disruption caused by the pandemic.	The pandemic has exposed the vulnerability of the GVCs to huge disruptions and that big crises like this pandemic. Agile adaptability needed from the GVCs in order to maintain the GVCs way of international cross-border operating.	Statements shown in the Article tend to be presented as "facts" such as certain sectors / industries being more vulnerable and affected by COVID-19 than others. It does not consider the ongoing changes and how those facts are changing.

Figure 6. Matrix 3 Covid-19



### 3. Discussion and Conclusion

Matrix 4 below showcases the strengths and weaknesses in the literature summarised in the above literature review. From this last matrix, it could be seen that each of the time periods had specific features that differ from each other. In the initial period from 1994 until 2007, the focus was on studying the concept of governance and creating different typologies that helped to map it out. The authors were mainly developing different perspectives upon the GVC; however, none of the academic texts presents a unified approach to the GVC governance and GVC theory in general. Furthermore, it could be seen from the literature that there is a tendency to focus on the production side of such GVC, where none of the authors took in consideration how those activities create value for the product, company or user. Following that, the focus of the literature is narrowed to labour-intensive industries in which production is mainly focused on the Third world countries. Thus, there is a visible lack of consideration of the service as an outcome of GVC. Even though the majority of the academic texts from this time period seem to agree that GVCs are becoming more dispersed and globalised, it seems rather one-sided, as the authors tend to consider only specific industries and thus types of GVC to look at.

However, with the arrival of the Global Financial Crisis in 2008, authors start to wonder if the literature until this date has covered the possible implications and effects on a shared global economy. Moreover, they identify a need to combined previous theories in GVGs and GPNs into modular and flexible frameworks that would also include macro factors such as the technological advancements and communication technology, the participation of intra-firm relationships, the regulatory normative by institutions and their key role on trade decisions, and the new voice of the consumers raising demands in fast speed of conveyance and environmental concerns. Nevertheless, the authors in this time frame have split feelings towards the different forces in pro-globalisation such as neoliberalism, deglobalisation phenomena with the rise of nationalism economy and reshoring of manufacturing activities due to technological advancements and the challenges of a society with a lack of belonging in what it is considered a highly interconnected world.

Matrix 4		Task 3		
Time Division	Authors combined	Strengths	Weaknesses	Gap
1994-2007	Gereffi, Sassen, Humphrey and Schmitz, Sturgeon	<ol style="list-style-type: none"> <li>1. Development of theoretical and typological mapping of the GVC governance</li> <li>2. Academics agree upon globalisation and geographical dispersion of production</li> <li>3. Presents the perspective of local clusters and their interaction with the GVC, where the focus is put on the upgrading</li> <li>4. Presence of the Internet and the shift towards e-commerce</li> <li>5. New conversation about the correlations between subsidiaries and transnational companies</li> <li>6. Key insights on coordination and control of the global scale production systems</li> <li>7. Looks into the creation and offshoring of jobs thus, starts the conversation between the cost vs benefits of the global outsourcing</li> <li>8. Consideration of the difficulties developing countries face in case of becoming part of the global production networks</li> </ol>	<ol style="list-style-type: none"> <li>1. There is no unified theory or framework on GVC</li> <li>2. No further consideration of other aspects and key actors of the GVC such as value creation and lack of services</li> <li>3. Lack of literature that is combining the local production and the global aspect of the GVC and decision-making processes</li> <li>4. Narrowed focus on the production in labour intensive industries</li> </ol>	<ol style="list-style-type: none"> <li>1. Need of consideration of services and consumers</li> <li>2. Broadening up the industries for analysis, not being focused only on labour-intensive third world production</li> <li>3. Need to go beyond cost reducing of production</li> </ol>
2008-2018	Gibbon, Bair and Ponte; Bude and Dürssmitd; Livesey; Horner and Nadvi; Laurens, Le Bas, Schoen and Larédo	<ol style="list-style-type: none"> <li>1. Try to unify GVC governance theory into modular frameworks.</li> <li>2. Consider the possible deglobalisation processes which began in 2008 with the Global Financial Crisis</li> <li>3. They take into consideration other aspects and actors of the value chain and global trade, such as transnational institutions and the consumer.</li> <li>4. They share that automatization, the consumers demand on environmental concerns and fast transportation of final</li> </ol>	<ol style="list-style-type: none"> <li>1. Not all aspects of previous theories and disciplines can be integrated in a single theory because of the fundamental differences and epistemological and analytical discrepancies.</li> <li>2. The difference between the expectations and current state in the development of global trade could mean looking into new ways of defining Value Chains and Production Networks.</li> </ol>	<ol style="list-style-type: none"> <li>1. What are other factors that can play a key role on globalisation/deglobalisation processes? 2. What would be the innovation required for theory in the given current economic, political and sociological landscapes?</li> <li>2. Effects global pandemic or a bigger political instability.</li> </ol>

Figure 7. Matrix 4

		<p>product, robotics, and the difficulties to distribute knowledge across the chain can cause reshoring of certain activities such as R&amp;D and contribute to further deglobalisation. Moreover, in a sociological aspect the rising feelings against “flow of speak” and lack of belonging and concept of home despite a highly interconnected societies and spatial distance being virtually reduced.</p> <p>5.They share the concerns when the seek for cheap labour is being substituted by technology.</p> <p>6.Remapping the geographical distribution of trade power into polycentric. The growth in trading between nations in the Global South.</p>		
2019-2020	Tauseef Ahmad , Haroon, Mukhtiar Baig , Jin Hui, Gary Gereffi, Alain Verbeke	<p>1.Acknowledge the power of the public policy makers and governments which decision has affected the GVCs.</p> <p>2. Give a detail overview of the changes in in the transportation, outsourcing and insourcing of goods since the pandemic</p> <p>3.They all cast the light on the big power of the policy makers and governments and conclude that they have had the decision-making role in the changes that have affected the GVCs</p>	<p>1.The authors have not emphasised that it is yet to be seen who and which industry will be affected from the pandemic</p>	<p>1.The authors only tend to focus on a few industries which have suffered so far. However, they have failed to state that the results and outcome of the pandemic are yet to be seen.</p> <p>2.Failed to acknowledge the different flows of GVCs that have not been hugely affected and disrupted.</p> <p>3.Everyone except Gary Gereffi has mostly been focused on analysing the effect of the pandemic. Gary has mainly pointed out in which direction the GVCs should go in order to adapt to disruptions.</p>

Figure 8. Continuation Matrix 4

The development of Covid-19 has caused a disruption, which has shown that the GVCs tend to be fragile and tend to be affected by other parties, not just the pandemic itself. The academic texts highlight the involvement of the governments and the public policymakers and argue that they have proven that they do have the power to close down borders, limit and even block the flow of goods and labour for a certain period of

time between countries and by doing that, they have disrupted the GVCs. Their decisions and new regulations have been taken without discussion with any of the parties that have been affected. The academic literature has mainly focused on analysing the changes that have happened in the GVCs, and they point out that the disruption has been shown into an economic and health crisis, and has also affected the global trade and the international relations between countries. However, only Gary Gereffi has pointed out a few directions and proposals on where the GVCs should go in the future in order to adapt and be more agile.

In conclusion, there was a shift in the literature within the time periods, where in the first timeline, the academic literature was mainly focused on the development of theoretical typologies and frameworks regarding the GVC and the concepts involved. In the following financial crisis, there was a shift within the academic literature where authors saw the demand for further looking into the sociological and political aspects of the GVC. Lastly, with the hit of Covid, the GVC literature developed in a way that focused on the fragility of the GVC as well as the impact of the other actors involved, where the main point was to look into the disruptions and changes that Covid-19 caused within the industry.

In other words, the need for further research can be seen within the GVC with a narrowed focus on the creation of a single approach towards the frameworks and understanding of concepts. Moreover, there is the need for further inclusion of the consumers as well as consideration of the external agents and their impact on the GVC within both developing and developed countries. Lastly, one of the important discussions nowadays tends to be how the GVCs will handle the distribution of the Covid-19 vaccine. This certainly is an important topic since one of the main questions and challenges that arise is whether the distribution channels will have the capacity to distribute the vaccine across the globe. It is assumed that the distribution has to be done in the right way and under the right condition since the vaccines will need a specific temperature and environment during the distribution.

### 3. Bibliography

Ahmad Tauseef, Haroon, Baig M, Hui J. Coronavirus Disease 2019 (COVID-19) Pandemic and Economic Impact. Pak J Med Sci.

Beyond the Producer-driven/buyer-driven Dichotomy. The evolution of Global Value Chains in the Internet Era 2001 by G.Gereffi

Bude, H. and Dürrschmidt, J., 2010. What is wrong with globalisation?: Contra 'flow speaks' - towards an existential turn in the theory of globalisation. *European Journal of Social Theory*, 13(4), pp.481-500.

Dicken, P., 2011. *Global Shift*. 6th ed. London: SAGE.

Eriksen, T. H., 2014 *Globalisation: The Key Concepts*. London: Bloomsbury Publishing, UK.

Gereffi, G. 2020, What does the COVID-19 pandemic teach us about global value chains? The case of medical supplies, USA

Gereffi, G., 1994. The Organisation of Buyer-driven Global Commodity Chains: How U.S. Retailers Shape Overseas Production Networks. In: M. Korzeniewicz, ed. *Commodity Chains and Global Capitalism*. London: Praeger, Westport, Connecticut, pp. 96-121.

Gereffi, G., 2005. An Overview of the contemporary global labour market. In: *The new Offshoring of jobs and global development*. s.l.: International Institute for Labour Studies, p. Chapter 1.

Gereffi, G., Humphrey, J. and Sturgeon, T., 2005. The governance of global value chains. *Review of International Political Economy*, 12(1 February 2005), pp.78-104.

Gibbon, P., Bair, J., & Ponte, S., 2008. Governing global value chains: an introduction, *Economy and Society*, 37:3, 315-338.

Horner, R. and Nadvi, K., 2017. Global value chains and the rise of the Global South: unpacking twenty-first-century polycentric trade. *Global Networks*, 18(2), pp.207-237.

Humphrey, J. and Schmitz, H., 2002. How Does Insertion in Global Value Chains affect Upgrading in Industrial Clusters? *Regional Studies*, 36(9), pp. 1017-1027.

Humphrey, J. and Schmitz, H. 2000. *Governance and Upgrading: Linking Industrial Cluster and Global Value Chain*. IDS Working Paper 120, Institute of Development Studies, University of Sussex, Brighton.

Humphrey, J. and Schmitz, H., 2001. Governance in Global Value Chains. *IDS Bulletin*, 32(3), pp.19-29.

Laurens, P., Le Bas, C., Schoen, A. and Larédo, P., 2018. Internationalisation of European MNCs R&D: "deglobalisation" and evolution of the locational strategies. *Management international*, 19(4), pp.18-33.

Livesey, F., 2018. Unpacking the possibilities of deglobalisation. *Cambridge Journal of Regions, Economy and Society*, 11(1), pp.177-187.

Pieterse, J. N., 2012. Periodizing Globalization: Histories of Globalization. *New global studies*. 6 (2), 1-25.

Rodrik, D., 2016. There Is No Need To Fret About Deglobalisation - Politicians Should Focus On Restoring The Domestic Social Contract. [Drodrik.scholar.harvard.edu](http://Drodrik.scholar.harvard.edu).

Sassen, Saskia (1998). *Globalisation and Its Discontents*. New Press.

Verbeke, 2020, Will the COVID-19 Pandemic Really Change the Governance of Global Value Chains, *British Journal of Management* 2020.