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The Role of Vietnam's FDI Inflows in Global Value Chains Participation and Economic Growth

Jinho Choi, Marthe M. Hinojales, Seung Hyun (Luke) Hong
and Jade Vichyanond

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Prepared by (in alphabetical order) Jinho Choi, Marthe M. Hinojales, Seung Hyun (Luke) Hong and Jade Vichyanond^{1 2}

Approved by Hoe Ee Khor (Chief Economist)

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Abstract

Vietnam has posted strong and robust economic growth since its opening-up of the economy in the late 1980s. More recently, it has seen an explosive growth in exports amid strong foreign direct investments (FDI). This study aims to explore the role of Vietnam's FDI inflows in spurring its exports via global value chains (GVC) participation, as well as boosting economic growth. Strong FDI inflows are found to have helped Vietnam successfully transform into a manufacturing-oriented economy, with intensified GVC participation over the past decades. As Vietnam continues its developmental path, some of weakening pull factors require the authorities' well-planned efforts to maintain the country's attractiveness as an investment destination. To gain tractions in its growth momentum spurred by FDI and GVC participation, Vietnam should further strengthen the domestic business sector and skilled labor supply, while continuing to enhance the business environment. The pandemic-induced GVC reconfiguration provides a good opportunity for Vietnam to upgrade its GVC participation, where a careful strategy to attract the "right" projects will be critical.

JEL classification: E10, E22, F1, F10, F15

Keywords: Foreign Direct Investment; Global Value Chains; Potential Output; Economic Growth; Vietnam

¹ Authors' e-mails: choi.jinho@amro-asia.org; Marthe.M.Hinojales@amro-asia.org; Luke.Hong@amro-asia.org; Jade.Vichyanond@amro-asia.org. Jinho Choi is a Senior Specialist & Deputy Group Head at AMRO; Marthe M. Hinojales is an Economist at AMRO; Seung Hyun (Luke) Hong is a Group Head and Lead Specialist at AMRO; Jade Vichyanond is an Economist at AMRO.

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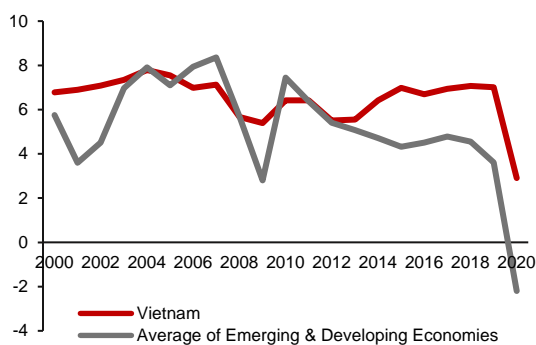
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I. Introduction

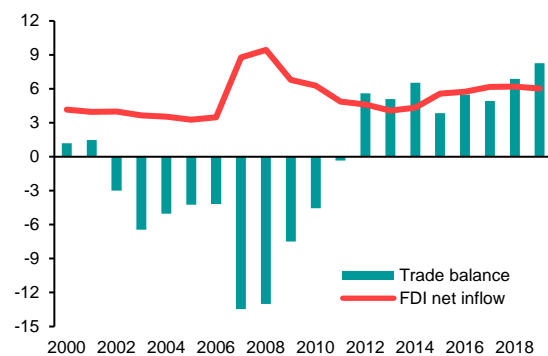
1. **Vietnam has made impressive economic achievement over the past two decades.** Since the ‘Doi Moi’ reforms in 1986, Vietnam has actively opened up its economy, participating in the regional economic cooperation community-ASEAN-in 1995 and joining the World Trade Organization in 2007. Such transitions have helped the economy to maintain rapid growth at around 7 percent since 2000s, except during the 2008-09 global financial crisis and the 2011-12 domestic financial turbulence. In particular, amid general slowdown of emerging markets in the post GFC period, Vietnam has maintained its strong growth momentum (Figure 1), and its trade balance turned into surplus, supported by strong foreign direct investments in manufacturing exports (Figure 2).

Figure 1. Real GDP Growth, 2000-2020
(Percent year-on-year)



Source: International Monetary Fund via Haver Analytics
Note: Emerging & Developing Economies' GDP growth rates are based on the purchasing-power-parity-weighted averages of 156 economies' GDP.

Figure 2. Trade Balance and Net FDI Inflows
(Percent of GDP)



Source: State Bank of Vietnam (SBV); General Statistics Office of Vietnam (GSO) via Haver Analytics; and AMRO staff calculations

2. **Understanding key driving forces of Vietnam's strong FDI inflows and the subsequent impact on growth potential is essential to assess its economic achievements and limitations.** Vietnam has been one of the most active players in cross-country production sharing arrangements, or global value chains (GVC) network. Hence, analyzing Vietnam's inward FDI through the lens of its GVC participation patterns would help to appreciate its economic achievements over the past decade. Moreover, analyzing the dynamic impact of capital stock and other production inputs on Vietnam's long-term growth potentials can provide a good basis for assessing its economic achievements and constraints. Key drivers of FDI inflows can be discussed as push and pull factors depending on their source, in particular, considering the impact of the ongoing COVID-19 pandemic on the global supply chains.

3. **Against this backdrop, this paper seeks to address various questions, centering on the role of strong FDI inflows in spurring Vietnam's exports via GVC participation, as well as boosting economic growth.** Key questions to be covered in each section are outlined as follows:

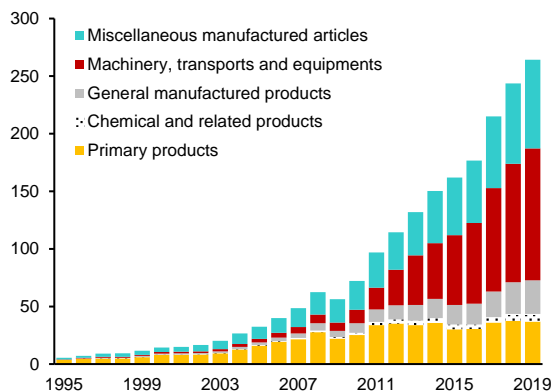
- How has Vietnam's exports and GVC participation evolved over the last decade? (Section II)
- What has been the relationship between inward FDI and GVC participation in Vietnam (Section III)?

- What has been the relationship between strong FDI inflows and production factors (labor, capital, total factor productivity) for Vietnam’s long-term growth potential? (Section IV)
- What are key driving forces of Vietnam’s FDI inflows among push and pull factors? Could the COVID-19 pandemic become additional push factors to accelerate GVC relocation into Vietnam? (Section V)
- What are the key policy implications from the main findings of this paper? (Section VI)

II. Evolution of Vietnam’s Exports and GVC Participation

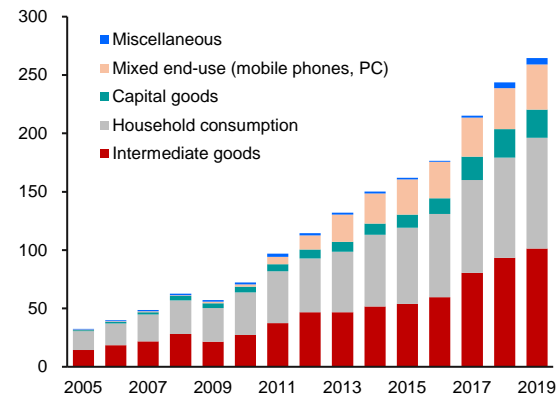
4. **Vietnam’s exports have diversified and grown exponentially over the past two decades.** Vietnam’s gross exports of goods reached USD264.2 billion in 2019, a 48-times increase in 25 years from USD5.5 billion in 1995 when it joined ASEAN (Figure 3). During these two decades, Vietnam’s exports have become more diversified and sophisticated.³ In the 1990s through the first half of 2000s, primary products, such as food and mineral fuels, accounted for more than half of total exports. From the early 2000s, miscellaneous manufactured goods—such as textiles and clothing—began to increase their contribution to Vietnam’s exports. And since 2013, the share of machinery, transports and equipment—in particular mobile devices—in total exports, has grown exponentially and exceeded other manufactured and primary products. In terms of end-use, Vietnam’s exports comprise mainly intermediate goods and final consumption goods, while mixed end-use and capital goods have grown in prominence recently (Figure 4).

Figure 3. Exports of Goods by Product, 1995-2019
(Billions of USD)



Source: GSO
Note: Based on SITC (Standard International Trade Classification).

Figure 4. Exports of Goods by End-Use, 2005-2019
(Billions of USD)

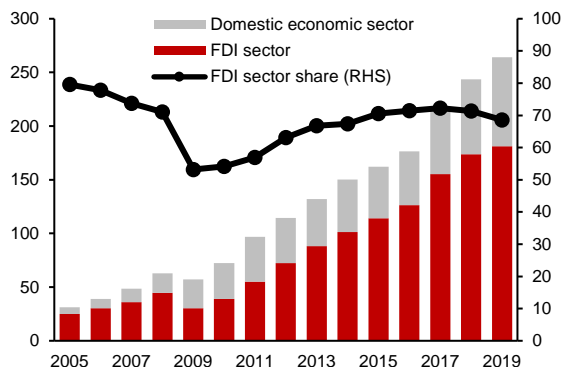


Source: GSO; OECD STAN (Structural Analysis) Database

³ ADB’s Multi-Regional Input-output (MRIO) database also confirmed this transition. Vietnam’s low technology manufacturing jumped from 30.7 percent in 2000 to 50.3 percent of gross exports of goods and services in 2017, comprising food, beverages and tobacco (20.7 percent of gross exports), textiles and textiles products (11.7 percent), and leather and footwear (8.6 percent). High and medium technology manufacturing has increased five-fold from 4.1 percent in 2000 to 20.8 percent, led by electrical and optical equipment (12.2 percent). In contrast, the percent contribution of primary goods declined substantially from 42.1 percent in 2000 to 11.9 percent in 2017.

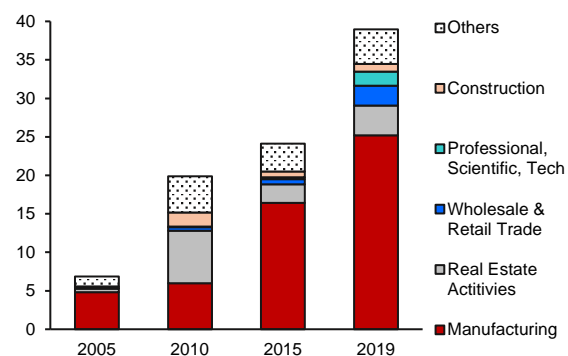
5. **Foreign direct investments (FDI) have played an important role in the rapid growth of exports (Figure 5).** Since Samsung Electronics' large investments in Bac Ninh in 2007, Vietnam has emerged as a major final assembly hub for ICT hardware and electronic-related products. According to World Bank Group (2017), about 80 percent of electronics/ ICT hardware and over 30 percent of electronic-related products produced in Vietnam are destined for export markets, and are mostly manufactured by foreign firms. Growing interest in Vietnam as a production base has led to strong FDI inflows, particularly in the manufacturing sector. Additionally, FDI into higher value-added non-manufacturing sectors has increased recently too, in particular, in professional, scientific and technical activities, which will help improve Vietnam's business environment and total factor productivity going forward (Figure 6).

Figure 5. Exports of Goods by Type of Ownership
(Billions of USD; Percent)



Source: GSO via Haver Analytics; AMRO staff calculations

Figure 6. Registered FDI Capital by Economic Activity
(Billions of USD)



Source: GSO via CEIC

6. **The decomposition of Vietnam's gross exports in terms of sources of value added shows the dynamic nature of GVC participation.** As multi-country production sharing arrangements have become a new norm in international trade, a simple summary of gross exports data is insufficient to understand key strengths and weaknesses of a country's export structure. In this regard, the gross exports accounting framework proposed by Wang, Wei, and Zhu (2018) provides a useful toolkit to quantify how much of the value added embedded in Vietnam's gross exports are explained by domestic or foreign production factors. Applying this methodology to the ADB MRIO database covering the period 2000 and 2007-2017⁴, Vietnam's gross exports—at both aggregate and the five broad sectoral levels⁵—can be decomposed into two major categories – domestic value-added (DVA) and vertical specialization (see Box A on Gross Exports Decomposition Methodology). Vertical specialization comprises foreign value-added (FVA) and pure double counted items (PDC), the latter of which reflect 'back-and-forth' trades in intermediate goods involved in multiple cross-border production sharing arrangements, or more complex GVC activities.

⁴ As of 23 November 2020, ADB MRIO database's annual input-output tables are published up to 2019 on its website (<https://mrio.adb.org/>). However, due to some data breaks observed in Vietnam's 2018-19 tables, this analysis uses the input-output data tables only up to 2017.

⁵ Industries of ADB-MRIO Database are grouped into sectors as follow for ease of analysis. For example, Primary sector includes Agriculture, Hunting, Forestry and Fishing, Mining and Quarrying; Low tech sector includes Food, Beverages and Tobacco, Textiles and Textile Products, Leather and Footwear, Wood and Products of Wood and Cork, Pulp, Paper, Printing and Publishing, Rubber and Plastics, Manufacturing, Nec, Electricity, Gas and Water Supply, Construction; High tech sector includes Coke, Refined Petroleum, and Nuclear Fuel, Chemicals and Chemical Products, Other Non-Metallic Mineral, Basic Metals and Fabricated Metal, Machinery, Nec, Electrical and Optical Equipment, Transport Equipment. See ADB (2015) for the details of industrial sector aggregation.

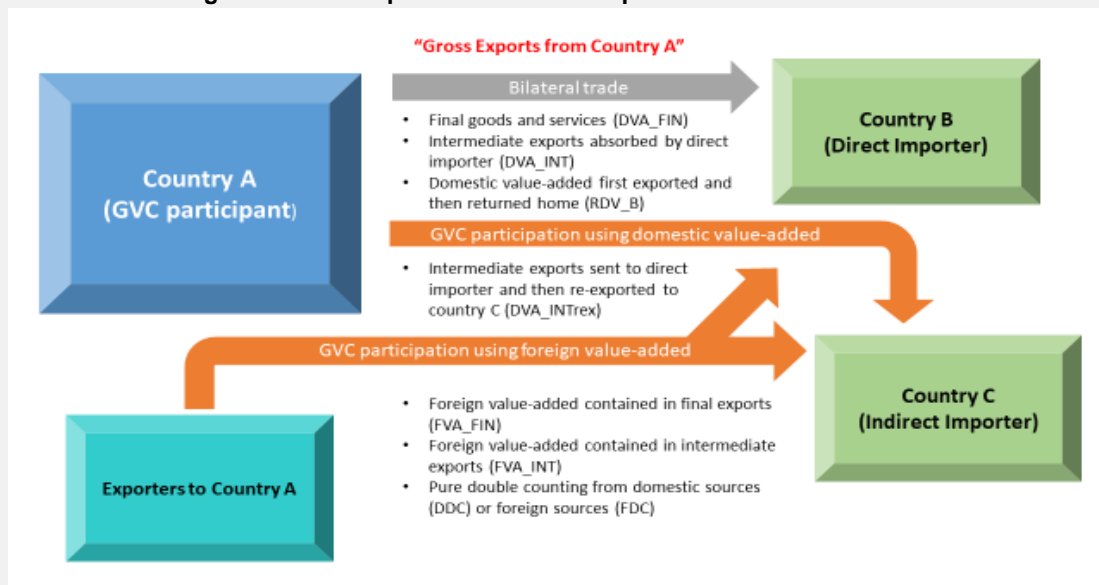
Box A. Gross Exports Decomposition Methodology

Wang, Wei, and Zhu (2018) provides a systematic way of decomposing a country's gross exports in value-added terms from a GVC participation perspective: 1) bilateral trade components not engaged in GVC participation; 2) domestic value-added (DVA) contributions to GVC participation; and 3) foreign value-added (FVA) contributions to GVC network via vertical specialization (Figure A1).

More specifically, DVA consists of two components: DVA absorbed abroad (VAX_G) and DVA first exported and then returned home (RDV_B). The former can be further decomposed into: (i) DVA in final use commodity exports (DVA_FIN); (ii) DVA in intermediate exports used by direct importer to produce its domestic final use commodities and consumed there (DVA_INT); and (iii) DVA in intermediates sent to the first importer and then re-exported to a third country (DVA_INTrex). Among DVA components, only DVA_INTrex is counted as contributing to GVC network via re-exports from a direct importer.

Meanwhile, vertical specialization comprises FVA and pure double counted items (PDC), both contributing to the economy's GVC participation. FVA can be further decomposed into: (i) FVA embedded in final use commodity exports (FVA_FIN); and (ii) FVA embedded in intermediate exports (FVA_INT).

Figure A1. Decomposition of Gross Exports in Value-added Terms



Source: AMRO

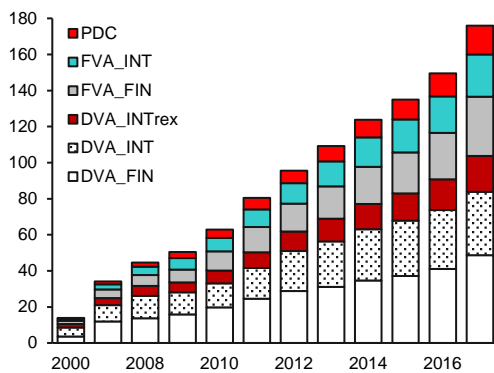
Note: Based on Wang, Wei and Zhu (2018) methodology.

7. Value-added decomposition of Vietnam's exports shows increasing vertical specialization over the past decades. Figure 7 indicates that all value-added components—DVA, FVA and PDC—have expanded over the past two decades in tandem with gross exports. Some of the key findings are as follows:

- The intensity of Vietnam's forward GVC participation, measured by DVA_INTrex (the part of DVA embedded in its intermediate exports that were re-exported to a third country), remained at about 11 percent during 2007-2017. By industry, both the low- and the high- and medium-manufacturing sectors have seen a modest increase in the intensity of forward GVC participation in this period (Figure 8).

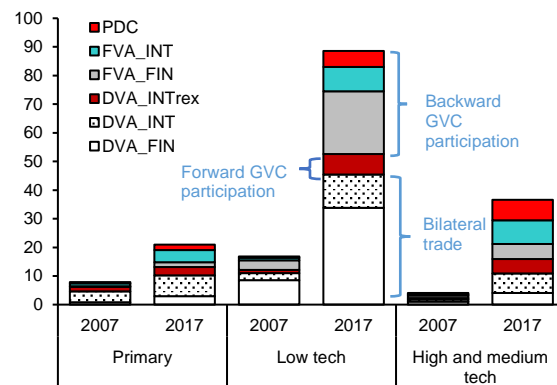
- The intensity of Vietnam's backward GVC participation (the contribution of FVA to gross exports) has increased from 23 percent in 2007 to 32 percent in 2017. For the low technology manufacturing sector, the contribution of FVA has jumped from 26 percent to 34 percent, while the sector's exports increased by five times. The high- and medium-technology sector has also benefited from rising FVA, whose contribution to the sectoral gross exports rose from 33 percent in 2007 to 37 percent in 2017.
- The rising contribution of PDC to gross exports indicates that the share of Vietnam's value-added in its exports that cross borders multiple times has increased. This phenomenon is commonly observed across industries, suggesting that Vietnam's cross-border production sharing activities have intensified.

Figure 7. Value-Added Decomposition of Gross Exports
(Billions of USD)



Source: ADB-MRIO Database (accessed on 16 September 2020); AMRO staff calculations

Figure 8. Value-Added Decomposition of Gross Exports by Manufacturers, 2007 vs 2017
(Billions of USD)

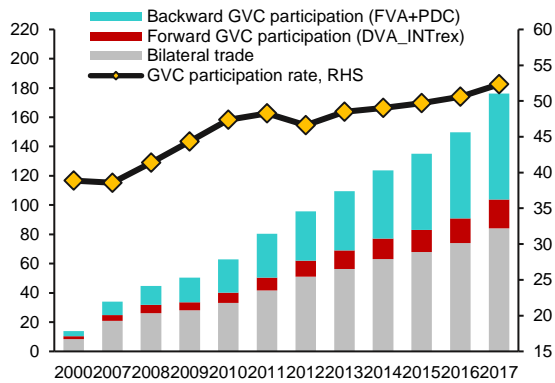


Source: ADB-MRIO Database (accessed on 16 September 2020); AMRO staff calculations

8. Vietnam's GVC participation has strengthened, driven mainly by backward GVC participation. Vietnam's GVC participation rate⁶ increased significantly from 38.6 percent in 2007 to 52.3 percent in 2017 (Figure 9). Among the manufacturing industries, the GVC network of the high- and medium-technology sector exhibits the highest participation rate at 70.1 percent in 2017, as a result of a more balanced combination of domestically sourced (DVA_INT, DVA_FIN) and foreign sourced (FVA_INT, FVA_FIN) value-added components, as well as 'back-and-forth' intermediate trades (PDC) (Figures 8 and 10). The low-technology sector has seen a surge in the GVC participation rate from 34.2 percent to 48.6 percent in this period, with a high reliance on foreign-sourced value-added in final goods exports. The primary sector has also intensified GVC participation, which is mainly attributable to foreign-sourced value-added in intermediate exports, while intermediate exports of domestic value-added goods are still significant in 2017.

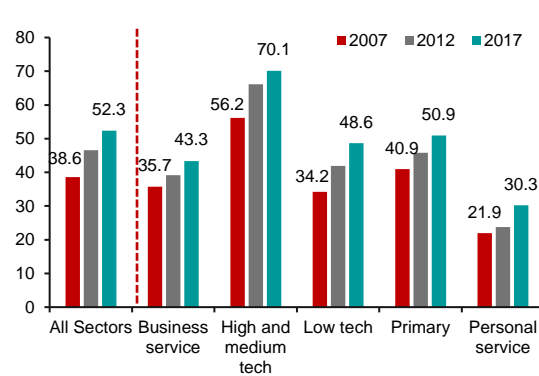
⁶ A country's GVC participation is often measured as the ratio of the sum of forward (DVA_INTrex) and backward GVC participation (FVA_INT + FVA_FIN + PDC) to gross exports, following Hummels et al. (2001) and Aslam et al. (2017). In principle, PDC, which consists of domestically sourced (DDC) and foreign sourced (FDC) components, can contribute to both forward and backward GVC participation. In the case of Vietnam, as DDC remains negligible, PDC is considered as contributing to backward GVC participation.

Figure 9. Breakdown of Gross Exports by GVC Participation
(Billions of USD; Percent of Gross Exports)



Source: ADB-MRIO Database (accessed on 16 September 2020); AMRO staff calculations

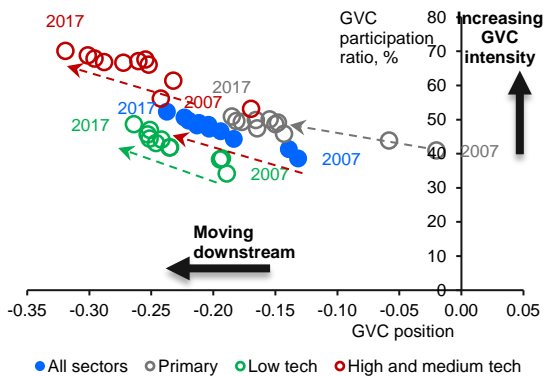
Figure 10. GVC Participation by Broad Sector
(Percent of Gross Exports)



Source: ADB-MRIO Database (accessed on 16 September 2020); AMRO staff calculations

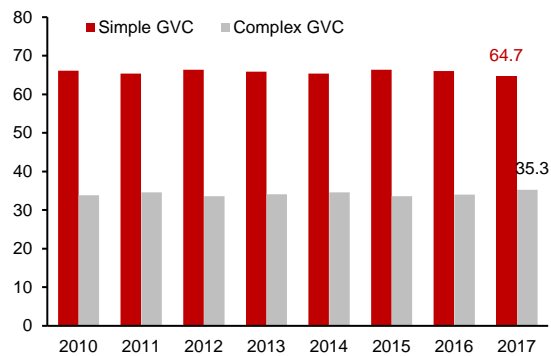
9. Vietnam’s GVC participation has been moving toward more downstream products, while concentrating on simple GVC-related activities. Figure 11 shows the shifting pattern of Vietnam’s GVC participation and relative position⁷ over the past decade. Vietnam has moved more downstream while intensifying its GVC participation. By industry, the shift to downstream in GVC network is most significant in the high- and medium-technology sector, followed by the low-technology sector, and then the primary sector. Meanwhile, in terms of GVC complexity, Vietnam’s participation has been mainly in simple GVCs (involving only a one-time border crossing for production), which accounts for about 65 percent of total GVC production activities in 2017 (Figure 12).

Figure 11. GVC Participation and Position, 2007 vs 2017
(Index; Percent of Gross Exports)



Source: ADB-MRIO Database (accessed on 16 September 2020); AMRO staff calculations

Figure 12. Simple versus Complex GVC as a Share of Total GVC Production Activities
(Percent)



Source: ADB-MRIO Database; AMRO staff calculations

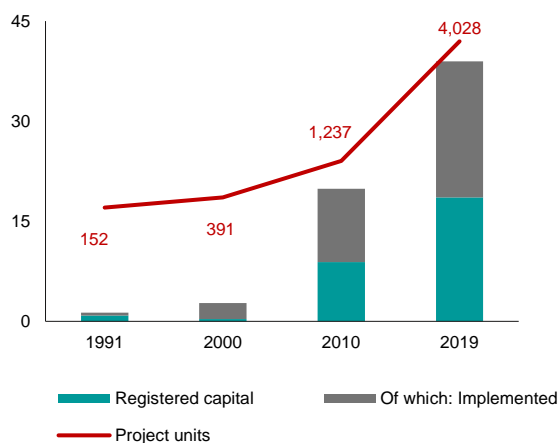
⁷ The relative position of Vietnam’s exports in the value chain is assessed based on Koopman et al. (2014). Vietnam’s GVC position index is constructed by the log ratio of its forward participation share to the backward participation share, i.e. GVC position index = $\ln(1 + \text{DVA_INTrex} / \text{Gross Exports}) - \ln(1 + (\text{FVA_INT} + \text{FVA_FIN} + \text{PDC}) / \text{Gross Exports})$.

III. The Nexus of FDI and GVC in Vietnam

10. **Foreign direct investment (FDI) into Vietnam has grown exponentially in the last three decades.** From a registered capital of USD 1.3 billion in 1991, the economy saw inflows of at least USD 168 billion by the end of 2010; in 2019, Vietnam recorded nearly USD 39.0 billion of newly registered capital (Figure 13). The rise in inward FDI in the 1990s have been facilitated by several pro-market reforms that started in the late 1980s, alongside the economy's attempts to integrate with the global economy. Indeed, the most notable turning points in its FDI experience coincided with key changes in its relations with the rest of the world, notably in 1995 (ASEAN membership) and in 2007 (World Trade Organization membership). Reflecting its reforms and opening-up policies, Vietnam is now considered to be among the most open economies in the ASEAN+3 in terms of FDI receipts; as of 2019, its net FDI inflows stood at 6.3 percent of GDP, the fourth-highest in the region (Figure 14) (World Bank Group, 2020a).⁸

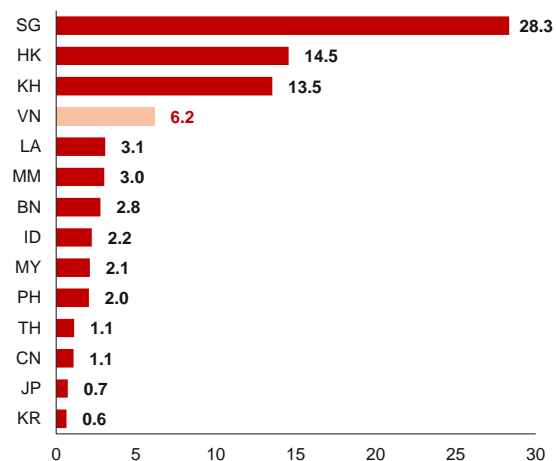
11. **Strong FDI into manufacturing is linked to the robust expansion of Vietnam's merchandise exports.** Increasing FDI inflows were followed by a similar acceleration in the exports of goods and services (Figure 15), where the exports of the FDI-invested sectors turned to be the primary contributors of export growth (Figure 16). In particular, the manufacturing sector, which accounts for the biggest share of FDI,⁹ shows a strong correlation between its export growth and the growth of its new investment receipts.¹⁰ The relationship between Vietnam's FDI and service exports follows the similar trend, albeit weaker than that of manufacturing.¹¹

Figure 13. Registered Capital of Licensed FDI Projects, 1991, 2000, 2010, 2019
(Billions of USD)



Source: National authorities via Haver Analytics; AMRO staff calculations

Figure 14. ASEAN+3: Net Receipts of Foreign Direct Investments, 2019
(Percent of GDP)



Source: World Bank (World Development Indicators)

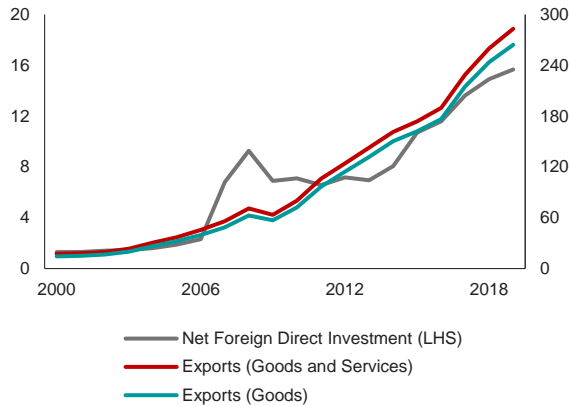
⁸ As of 2019, Singapore has the highest net FDI inflow-to-GDP ratio in the ASEAN+3 region (28.3 percent), followed by Cambodia (13.7 percent), Lao PDR (7.4 percent), and then Vietnam.

⁹ Between 2012 and 2019, at least 63 percent of new foreign direct investments went to the manufacturing sector. The share of manufacturing sector in FDI was 64.6 percent in 2019.

¹⁰ A simple exercise shows that the (contemporaneous) correlation between new FDI towards the manufacturing sector and FDI sector exports between January 2015 and October 2020 stood at 0.95, while that of new manufacturing FDI and domestic sector exports stood at a moderate 0.53.

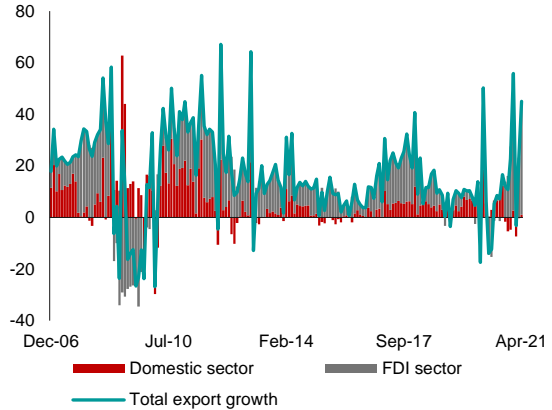
¹¹ This could be explained by the fact that foreign direct investments in services may not be entirely geared for exporting, but for the domestic market. A primary example here would be investments in the real estate sector. In this case, the relationship between Services FDI and domestic service consumption could be stronger, but this is outside the scope of this section.

Figure 15. Annual Exports and Net Foreign Direct Investments, 2000–2019
(Billions of USD)



Source: National authorities via Haver Analytics; AMRO staff calculations

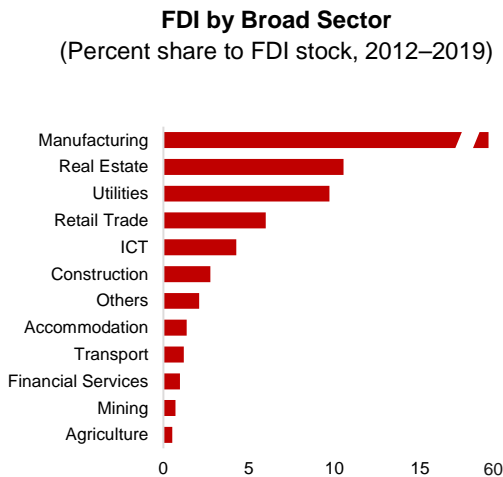
Figure 16. Contributors to Vietnam’s Export Growth, by Type of Enterprise
(Billions of USD)



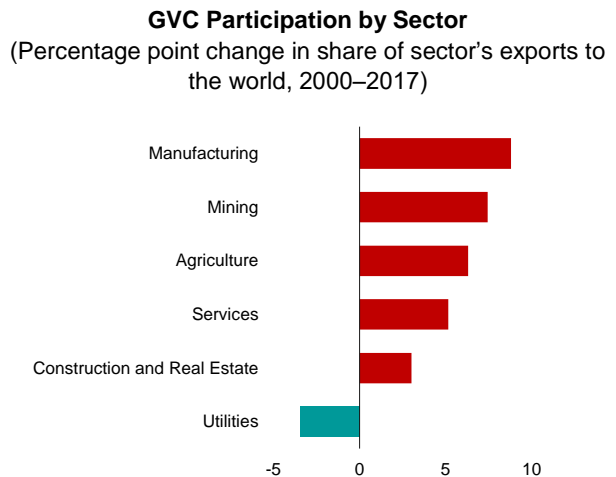
Source: National authorities via Haver Analytics; AMRO staff calculations

12. Openness in trade and FDI has helped Vietnam to strengthen its GVC participation, in turn reinforcing its openness. Highly correlated with trade, FDI has played a significant role in enabling Vietnam to increase its linkages to the global production network. As discussed in the previous section, Vietnam’s GVC participation has been trending up in the last decade, led by a strong increase in its inward FDI flows. As expected, the biggest increase in GVC participation is in the manufacturing sector which received the largest FDIs (Figure 17), confirming existing empirical studies that GVC participation also invites more FDI inflows (Martinez-Galán and Fontoura, 2018).¹²

Figure 17. Sectoral GVC Participation vis-à-vis FDI Stock



Source: Haver Analytics; AMRO staff calculations



Source: ADB Input-Output Tables; AMRO staff calculations
Note: A positive bar suggest an increase in GVC participation, as a share of Vietnam’s total exports between 2000 and 2017.

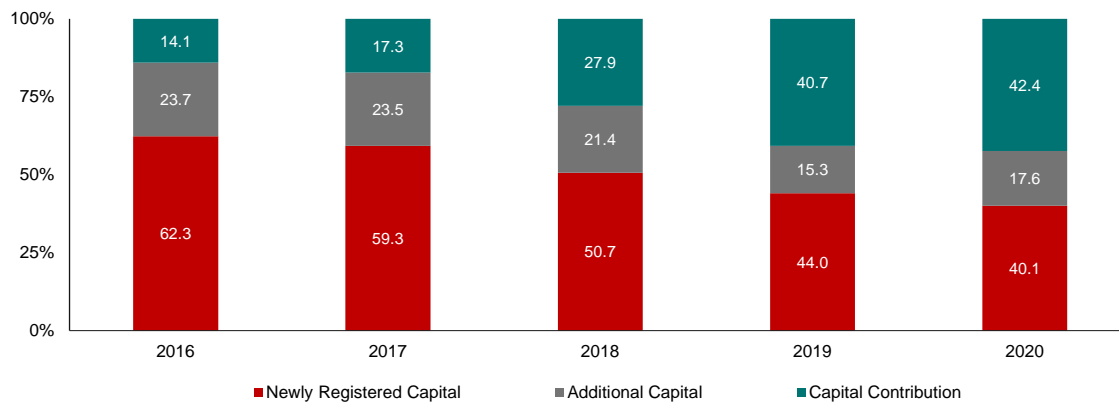
13. Vietnam’s participation in GVCs has been driven more by backward—rather than forward—linkages, likely due to the input requirements of the FDI enterprises. Between 2000 and 2017, Vietnam’s backward linkages as a share of total exports increased by 9.5 percentage point to 31.7 percent, while forward linkages as a share of its total exports remain

¹² In addition, GVC participation is known to lead to higher domestic-value added in the participating industries (Ignatenko, Raei, and Mircheva, 2019), while the openness is the key driver of GVC activity (Kowalski et al, 2015; Fernandes et al, 2020).

relatively stable at 10.7 percent. A faster increase in its backward linkages is also consistent with findings that Vietnam's participation is traditionally driven by upstream activities (ASEAN-Japan Centre, 2020), which are closely linked to FDI firms. FDI companies tend to require more foreign inputs from their parent-firm, among others, thus driving up the foreign-value added content of exports. For example, the share of foreign-value added content in Vietnam's exports of electrical and optical equipment has increased by 3.27 percentage points between 2000 and 2017, versus mere 0.95 percentage points for its forward linkage component (ADB, 2020). Other top exports, including machinery, chemicals, and even footwear, also saw its foreign-value added content increase during the same period.

14. The strong backward linkages support Vietnam's proven ability to meet MNCs' demand for efficiency and competitiveness. Investor motivations shape the type of FDI that enter an economy: it could be for market-seeking, natural resource-seeking, strategic asset-seeking, or efficiency-seeking. The last, which aims to take advantage of a location's competitiveness, is particularly important for economies aiming to move up the value chain (Fruman, 2016). Vietnam's long FDI experience, coupled with its increasing production capacity, demonstrates its strength in attracting efficiency-seeking FDI, and those aiming to reap the benefits of vertical integration. It has benefitted from the "slicing" of the stages of production into other locations where more cost-efficiency can be achieved (Anderer and others, 2020), which further strengthen its backward linkages. With the economy increasingly emerging as a production site, the economy has been able to attract investments via various routes for multinationals aiming for efficiency, and more recently, for strategic assets (through mergers and acquisitions) and new markets (Figure 18).

Figure 18. Annual Licensed Investments by Type of Investment
(Share to total licensed capital)



Source: Ministry of Planning and Investment, via Haver Analytics

Note: Newly registered capital refers to the new projects that have been granted with investment certificates; additional capital includes capital expansion, or upward adjustment of existing investment capital; while capital contribution includes purchases of shares.

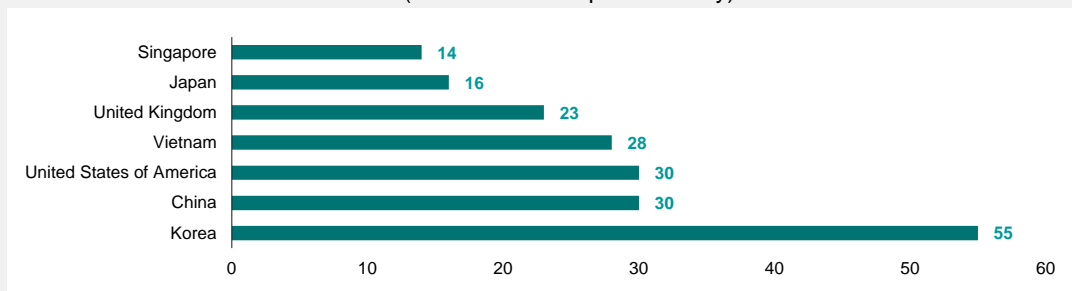
15. Big MNCs have greatly influenced the pattern of FDI-GVC participation relationship. As of March 2020, the Samsung Group remains the single largest foreign investor in Vietnam, with its investments totaling USD 17 billion so far (Samsung, 2020); as of 2019, its total company exports accounted for almost 19.5 percent of Vietnam's total exports (Hiep, 2020). Of its total investments, nearly USD 10 billion has been poured into Samsung Electronics since its first factory in 2008. Samsung sources most of its input components from non-domestic suppliers, thus contributing to Vietnam's backward linkages (see Box B on Multinationals in Vietnam).

16. **Vietnam's strong backward linkages are likely to continue in the near-term, given its export structure, and as its FDI attractiveness continues to be high.** In terms of end-use exports, most of them are largely primary or processed consumption items (as of 2019, 46.7 percent of its total exports are food and beverages). Its exports for intermediate use, which could ultimately strengthen its forward linkages, only comprised 15.3 percent of its total exports in 2019. In addition, several multinational firms continue to shift and recalibrate their production bases towards Vietnam, amid the restructuring of global supply chains, the heightened U.S.-China trade tension as well as the COVID-19 pandemic. More companies are moving some of their production activities to Vietnam, which will deepen its future GVC participation (see Box B).

Box B. Multinationals in Vietnam: Drivers of Backward GVC Participation

As the biggest foreign direct investor in Vietnam, it is not surprising that Samsung has a sizeable influence on the way Vietnam participates in GVCs, particularly its backward linkages. Prior to 2019, among around 100 of Samsung's suppliers who collectively account for 80 percent of its transaction volume, 28 were listed as operating in Vietnam, although these appear to be foreign-owned (Samsung, undated). More than half were based, or had operations, in Korea, 30 in China, and 16 in Japan (Figure B1).¹³ This sourcing breakdown is largely consistent with Vietnam's top imports from the Plus-3 economies, which are also mostly electronic in nature (Figure B2). In particular, these are mostly intermediate goods consisting of semiconductors and electronics (Figure B3).

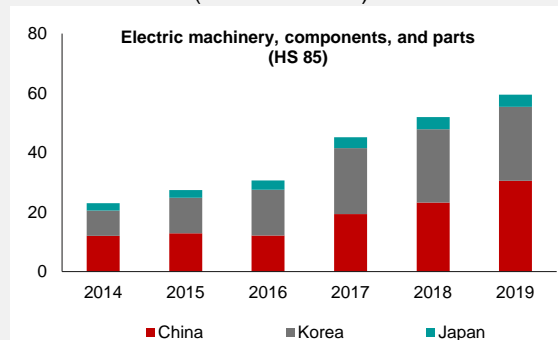
Figure B1. Top Locations of Samsung Suppliers, prior to 2019
(Number of firms per economy)



Source: Samsung (undated document prior to 2019, from <https://www.samsung.com/us/aboutsamsung/sustainability/supply-chain/supplier-list/>); AMRO staff calculations

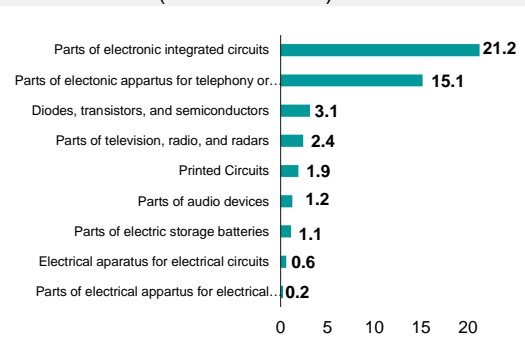
Note: Multiple locations of the same firm are each counted in the figure above.

Figure B2. Vietnam: Imports from Korea, China, and Japan of HS 85, 2019
(Billions of USD)



Source: IHS Markit; AMRO staff calculations

Figure B3. Vietnam: Imports of Electrical Machinery from Korea, China, and Japan, 2019
(Billions of USD)



Source: Haver Analytics; AMRO staff calculations

¹³ Note that as of 2019, the number of Vietnamese suppliers have increased from 28 to 42 (Hiep, 2020)

As Vietnam continues to be a highly attractive production base to other multinationals, the influx of these new MNC projects will also help shape its future GVC participation. For example, in May 2020, the media reported Apple shifting nearly 30 percent (up to 4 million units) of its wireless headphones (AirPods) into Vietnam away from China (Cheng and Li, 2020); as a result, its leading supplier Goertek has also confirmed plans to move its production in the same direction. Earlier in April, Google is reportedly looking at moving to Vietnam from China for its Pixel 4A smartphone (Jhaveri, 2020). These investment movements will have a significant impact on how the foreign and/or domestic-value added content of its electronics and electrical exports will change in the future. Similarly, the ongoing movement of international footwear and apparel firms such as Adidas, Nike, and Puma (Das, 2018) to Vietnam will also influence the backward linkages of the equally-significant garments sector.

17. Nonetheless, an influx of FDI is not automatically translated into a higher GVC participation of local firms. Several empirical studies highlight the relatively weak GVC participation of Vietnamese firms, especially when compared to that of the FDI sector (Hollweg, Smith, and Taglioni, 2017). Part of the reason appears to be the still-weak spillover and linkages between the FDI and domestic sectors, as well as a perceived weakness in Vietnamese firms' absorptive capacity for such spillovers. With these constraints, it is unlikely that the potential increase in FDI will raise local firms' GVC participation proportionally, nor will it trigger a broad-based increase in participation. In addition, as Vietnam's domestic market and consumption continue to grow rapidly, more FDI companies are focusing on serving the local market—such as service-oriented FDIs—rather than just latching on to GVCs for exports. Indeed, despite the strong growth in inward FDI between 2012 and 2017, the pace of GVC participation has moderated.¹⁴

18. Other structural deficiencies also need to be addressed for Vietnam to fully benefit from new FDIs and further its presence in GVCs. While Vietnam have made significant advances in making its economy highly attractive to multinationals (see Section V), timely and appropriate policy interventions could further strengthen the role of domestic firms in GVCs. This includes broader issues of enhancing domestic supply capabilities, as in the case of textiles, as well as other factors that will enable it to “move up” the value chains. This will require enhancing the quality of the workforce, service diversification, as well as technology adoption, as these will encourage the transition to the higher-value added segments of the supply chain.

IV. Strong Investment and Economic Growth

19. Vietnam's potential output and the factor contributions are estimated via the growth accounting method to assess the role of investment in its economic growth. Vietnam's potential output is estimated over the period from 1986 to 2019, using a human capital-augmented production function.

$$Y_t = A_t K_t^\alpha (L_t H_t)^{1-\alpha}$$

$$H_t = \exp(\varphi S_t)$$

Where Y_t represents GDP in year t , K_t the physical capital stock, L_t the labor component, H_t the human capital per worker, α the income share of capital, and A_t the total factor

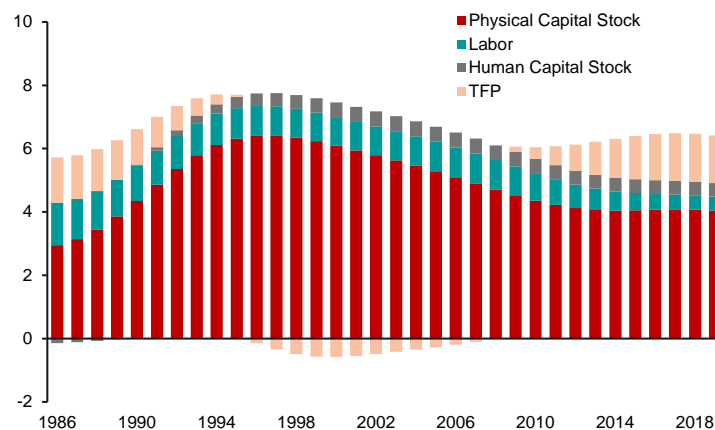
¹⁴ Between 2000 and 2012, net FDI flows grew by 1.07 percent, while GVC participation grew by 3.8 percent (compound annual growth rate, or CAGR). In the subsequent period (2012 to 2017), FDI flows grew by 13.7 percent; GVC participation likewise grew, but only at a rate of 2.3 percent.

productivity, calculated as a Solow residual. Human capital H_t is defined as a function of S_t average years of schooling in year t , and φ the return to education.

- Physical capital stock, based on the perpetual inventory method, and employment data are constructed from the Penn World Tables 9.1 Database.
- The labor income share ($1 - \alpha$) is assumed to be 0.44, using the 2004-2017 average of the ILO estimates for Vietnam.
- Data on years of schooling and return to education¹⁵ are constructed from the latest extension of Barro and Lee's (2013) database and Psacharopoulos and Patrinos (2004, 2018), respectively.

20. **Decomposition of Vietnam's potential output growth suggests that physical capital stock has been a dominant driver of its rapid economic growth.** Vietnam's potential growth rates had gradually moderated from the 7-8 percent range in the late 1990s to about 6 percent in 2009-10, before edging up to 6.5 percent in 2015-19 (Figure 19).¹⁶ Although the exact magnitude of the estimates may vary to some extent depending on the methodology used, such as trend-filtering method, choices of proxy variables for factor inputs and the like, the result has generally confirmed that physical capital stock accumulation has contributed the most to Vietnam's economic growth over the past decades and although its contribution has declined in recent decades, it still accounts for about two-thirds of potential output growth. Meanwhile, the contributions of both labor input and human capital stock to potential growth have remained relatively modest. In contrast, the contribution of total factor productivity (TFP) has increased significantly since 2010, when the influx of FDI accelerated.

Figure 19. Vietnam's Potential Growth Estimates
(Percent year-on-year)



Source: AMRO staff estimates

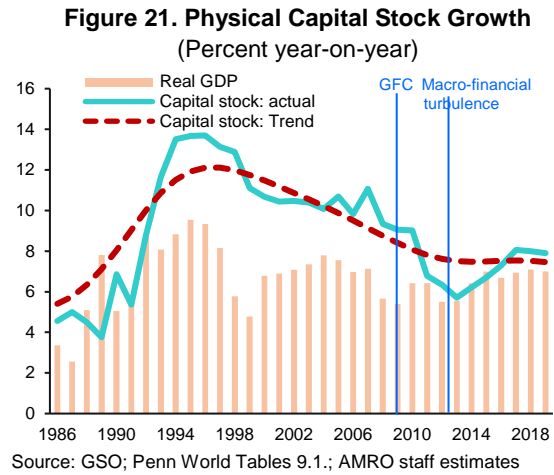
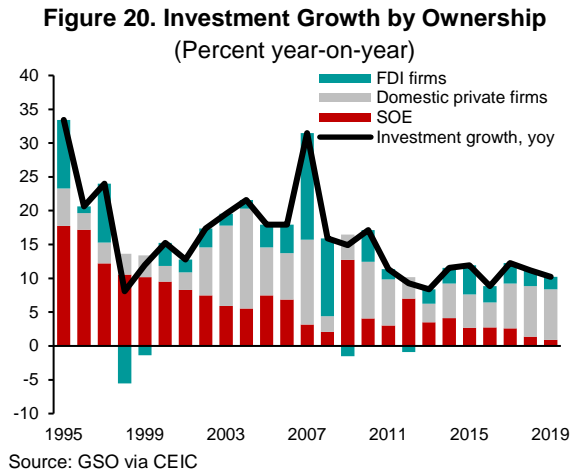
Physical Capital Stock

21. **Initially led by state-owned enterprises (SOEs), Vietnam's physical capital investment has been increasingly driven by non-SOE private enterprises.** Since the early 2000s, domestic private firms and FDI firms have increased their contributions to Vietnam's

¹⁵ In the literature on human capital, returns to investment in education have been estimated as regression coefficients on years of schooling in determining earnings under various model specifications such as ordinary least squares (OLS) and instrumental variable (IV). See comprehensive surveys of Psacharopoulos and Patrinos (2004, 2018) for details.

¹⁶ Vietnam was not immediately affected by the AFC and real GDP growth rates were as high as 8.2 percent, and 5.8 percent in 1997 and 1998, respectively. Instead, the growth rate declined to 4.8 percent in 1999, mainly due to a sharp decline of FDI inflows and high corporate debts.

capital stock accumulation while contributions from SOEs have declined (Figure 20). In the aftermath of the Global Financial Crisis and the domestic financial turbulence during 2011-12 triggered by a sharp increase in NPLs, capital stock growth dropped to 5.7 percent in 2013, followed by a moderate recovery to 8 percent in 2017, leading to a strong pick-up in GDP growth (Figure 21).



22. Capital stock accumulation by domestic private firms has been increasing but their profitability remains low. Investments made by SOE and non-SOE sectors are distinct in terms of key investment areas and profitability. As quasi-government agencies, SOEs have mainly undertaken infrastructure-related investments such as utilities, and transportation and storage. Meanwhile, investments made by domestic private firms and FDI firms are concentrated in manufacturing, trade and real estate activities (Figure 22). In terms of investment efficiency, FDI firms continue to outperform SOEs and domestic private firms, with their average returns on assets and long-term investment (13.2 percent in 2018) more than twice those of SOEs (5.8 percent) and domestic private firms (4.1 percent), partly reflecting the fact that FDI and SOE firms have focused on different industrial sectors (Figure 23). Among domestic private firms, joint stock companies without state capital as well as private limited companies have recently seen a surge in investment (Figure 24). However, the profitability of such domestic firms with mostly private capital has remained well below that of joint stock companies with state capital of 50 percent or less (Figure 25).

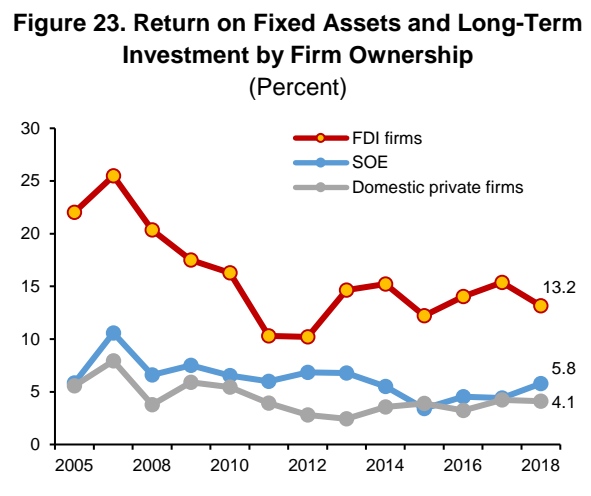
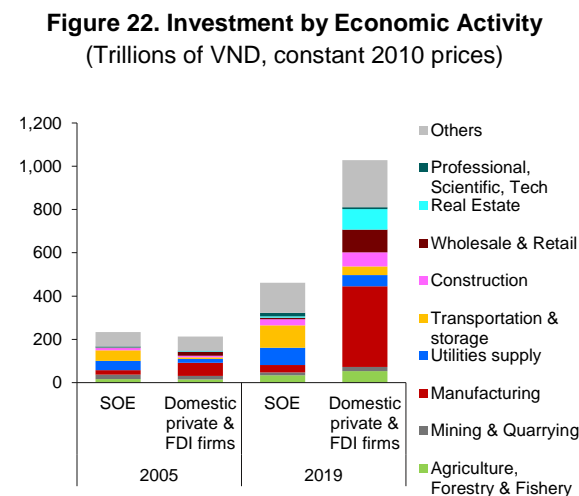
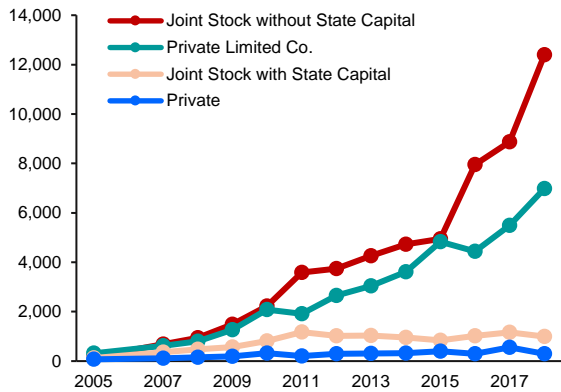
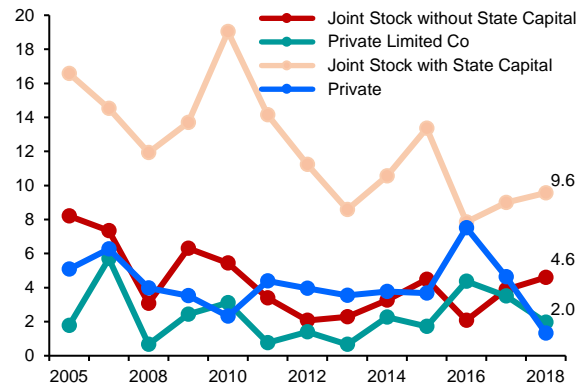


Figure 24. Average Capital by Type of Domestic Private Firms (Trillions of VND)



Source: GSO via CEIC

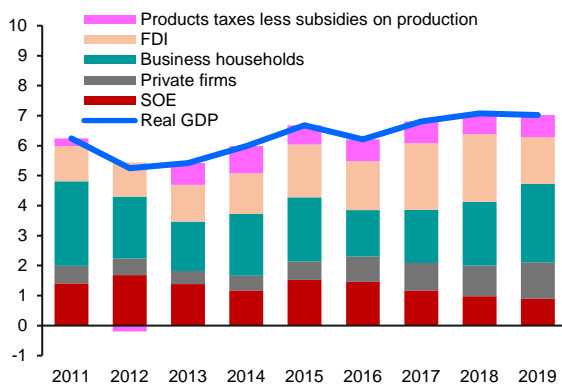
Figure 25. Return on Assets by Type of Domestic Private Firms (Percent)



Source: GSO via CEIC; and AMRO staff calculations
Note: Based on profit before tax/ fixed asset and long term investment.

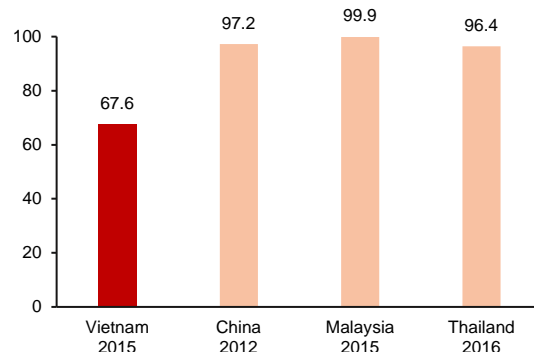
23. **The contribution of the domestic private sector to economic growth has risen significantly in the last several years.** In 2019, the private sector contributed about 49 percent to the country’s real GDP (excluding product taxes less subsidies), of which 35 percent was from households—which run micro/small businesses—and only 10 percent from domestic private firms and 4 percent from collective businesses. The share of SOEs has fallen from 33 percent of GDP in 2011 to 29 percent of GDP in 2019, lower than that of domestic private sector. Meanwhile, FDI firms’ contribution to GDP has increased steadily from 18 percent in 2011 to 22 percent in 2019 (Figure 26). While Vietnamese private firms may benefit from strengthening linkages with FDI firms, the spillover effects of FDI on domestic manufacturing capacity seem still limited (Figure 27).

Figure 26. Real GDP by Types of Owner (Percent year-over-year)



Source: GSO; AMRO staff calculations

Figure 27. Proportion of FDI Firms using Domestic Inputs (Percent)



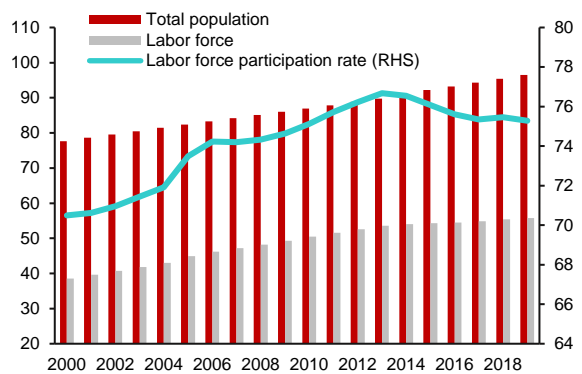
Source: World Bank Group (2017)

Human Capital Stock

24. **The supply of labor has slowed recently, moderating employment growth.** Vietnam’s total population has been growing steadily at slightly above 1 percent per annum in the past two decades, and its labor force participation rate remains high at around 75 percent in 2019. However, such favorable demographic dynamics which allowed ample labor supply in the past are changing gradually. The growth of the labor force has plateaued, and the labor

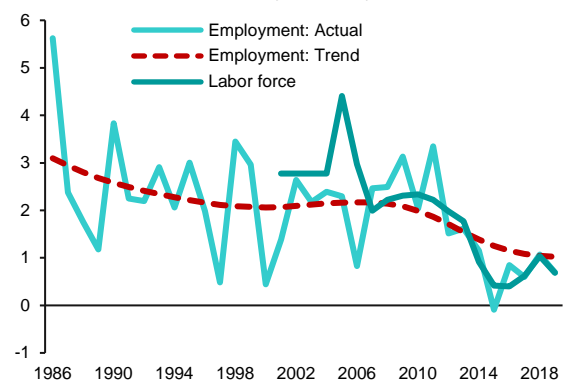
force participation rate has been moderating from its peak of 76.7 percent in 2013 (Figure 28). Additionally, slower growth in the labor force has led to a slowdown in employment growth in recent years (Figure 29) despite Vietnam’s low unemployment rate, which is hovering at around 2 percent. According to the UN’s long-term projection, Vietnam’s working-age population, aged 15-64, is expected to start to decline from 2038 (Figure 30). By type of enterprise, non-state sectors—including households and domestic private firms—remain the dominant employers, accounting for 84 percent of total employment in 2019 (Figure 31). Supported by strong FDI inflows, the number of workers hired by FDI firms has been growing while employment in SOEs has declined. Taking into account the fact that FDI firms tend to be (and are increasingly more) capital intensive and the government has been promoting SOE equitization/ divestment, the domestic private sector has to be further enhanced to provide more quality jobs in higher value-added sectors.

Figure 28. Labor Force Participation
(Million persons; Percent)



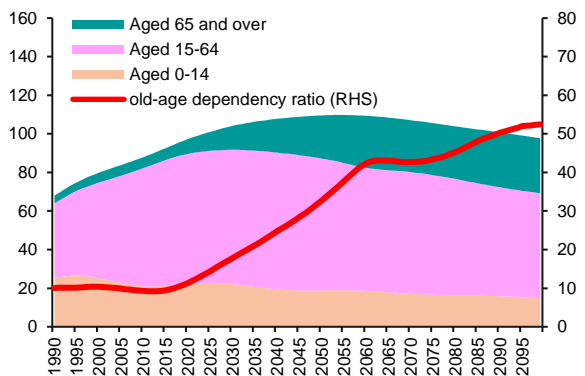
Source: GSO via Haver Analytics; AMRO staff calculations
Note: The labor force participation rate indicates the percentage share of labor force among the population aged 15 and above.

Figure 29. Growth in Labor Force and Employment
(Percent year-on-year)



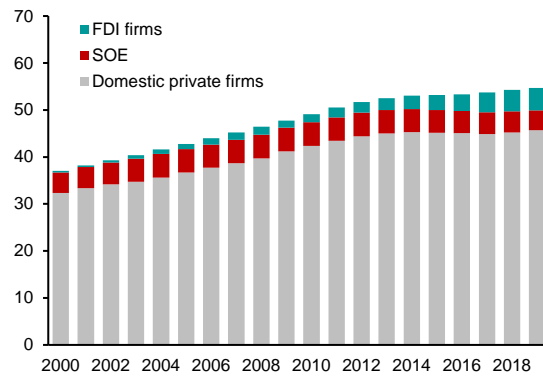
Source: GSO; Penn World Tables 9.1.; AMRO staff estimates

Figure 30. Long-term Projections for Demographic Changes
(Million persons; Percent)



Source: UN via Haver Analytics; AMRO staff calculations

Figure 31. Employment by Firm Ownership
(Million Persons)

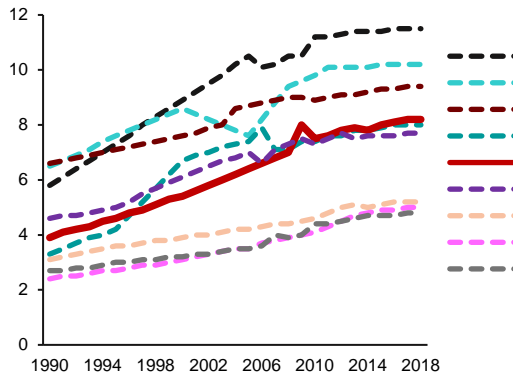


Source: GSO via Haver Analytics

25. The quality of Vietnam’s labor force has improved substantially with faster accumulation of human capital stock. One of Vietnam’s key strengths has been its ample supply of young and relatively skilled labor. Vietnamese students are known for their consistently outstanding performances in the International Student Assessment (PISA) test since they first started participating in 2012. Moreover, with Vietnam’s continuing strong emphasis on education, its average years of schooling has doubled from 4.1 years in 1990 to

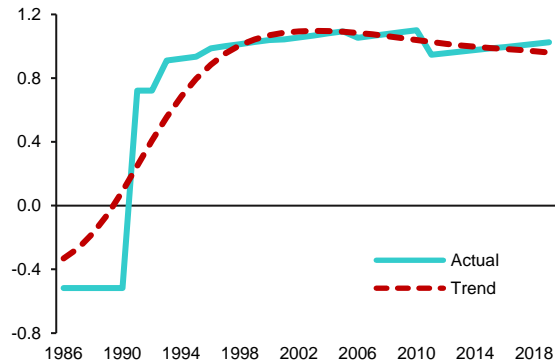
8.2 years in 2019 (Figure 32), which is reflected in a rapid accumulation of human capital stock estimates (Figure 33).

Figure 32. Average Years of Schooling
(Years)



Source: UNDP; Barro and Lee (2018)

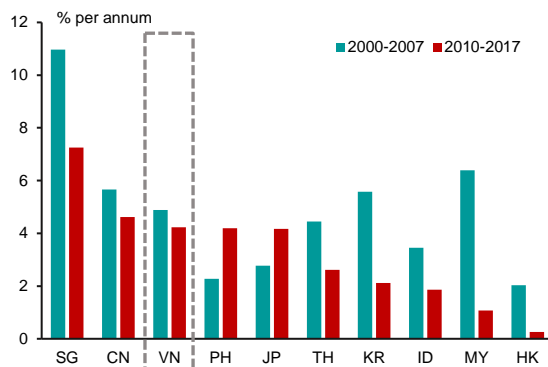
Figure 33. Human Capital Stock Growth
(Percent year-on-year)



Source: GSO; Penn World Tables 9.1.; Barro and Lee (2018)
Database; AMRO staff estimates
Note: 'Actual' indicates the growth rate of human capital per worker, measured as the product of average years of schooling and return on education.

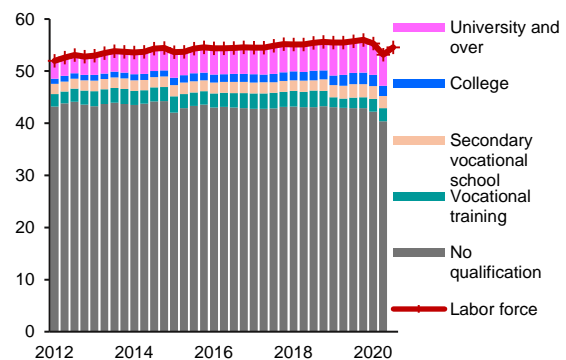
26. **However, Vietnam still has a long way to catch up with the regional peers in labor productivity.** The level of labor productivity in Vietnam, measured by output per worker, is still ranked among the lowest in the ASEAN+3 region in 2017, although this indicator should be used cautiously for cross-country comparisons, as it is less favorable to countries with strong labor-intensive industries. According to the latest World Bank's estimates (World Bank Group, 2020), however, progress in educational attainment has helped Vietnam's labor productivity grow annually by 5.2 percent on average between 2010-2018. In the manufacturing sector, Vietnam's labor productivity growth has been among the highest in the region (Figure 34). Despite the increase in average years of schooling and strong performance in PISA test, as of Q2 2020, about 76 percent of the labor force still has no professional qualification or technical skills needed for employment (Figure 35). In addition, the tertiary education institutions, including universities and technical and vocational schools, are not adept in providing the skills needed in the job market (Kataoka et al., 2020).

Figure 34. Labor Productivity Growth in Manufacturing Sector
(Thousands of 2011 Int'l PPP Exchange Rate)



Note: Based on annual growth rates of sectoral output per worker.
Source: World Bank (2020b, Global Productivity Trends)

Figure 35. Labor Force by Professional and Technical Qualification
(Million persons)



Source: GSO via Haver Analytics

Total Factor Productivity

27. **Global competitiveness indicators confirm the advances in Vietnam’s TFP.** The potential growth contribution estimates show that TFP’s growth contribution has increased significantly since the early 2010s in tandem with increased FDI inflows (Figure 36). TFP is usually understood as how efficiently measurable production input factors—labor and capital—are combined to generate a country’s output. Since it cannot be observed or measured directly, some indirect measures are often used as a proxy for TFP, such as country competitiveness indicators.

- Vietnam’s performance in the global competitiveness index (GCI) published by the World Economic Forum has been improving since 2012 both in terms of its overall score as well as global ranking (Figure 37). A breakdown of the 2019 GCI indicates that Vietnam consistently outperformed its peers (lower-middle-income economies) with significant leads in infrastructure, ICT adoption, human capital and market size categories. Meanwhile, Vietnam was comparable even to upper-middle-income economies in most categories except human capital skills (Figure 38).

Figure 36. Total Factor Productivity Growth
(Percent year-on-year)

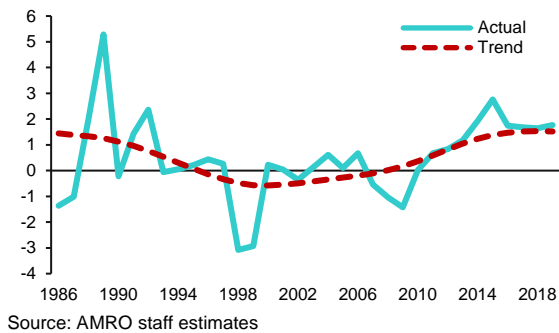


Figure 37. Vietnam: Global Competitiveness Index
(Score 1-7 [best]; Ranking)

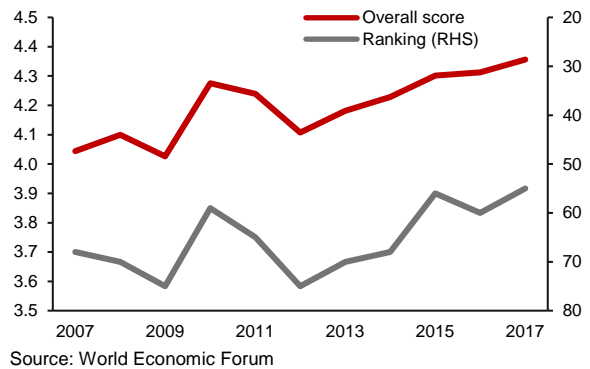
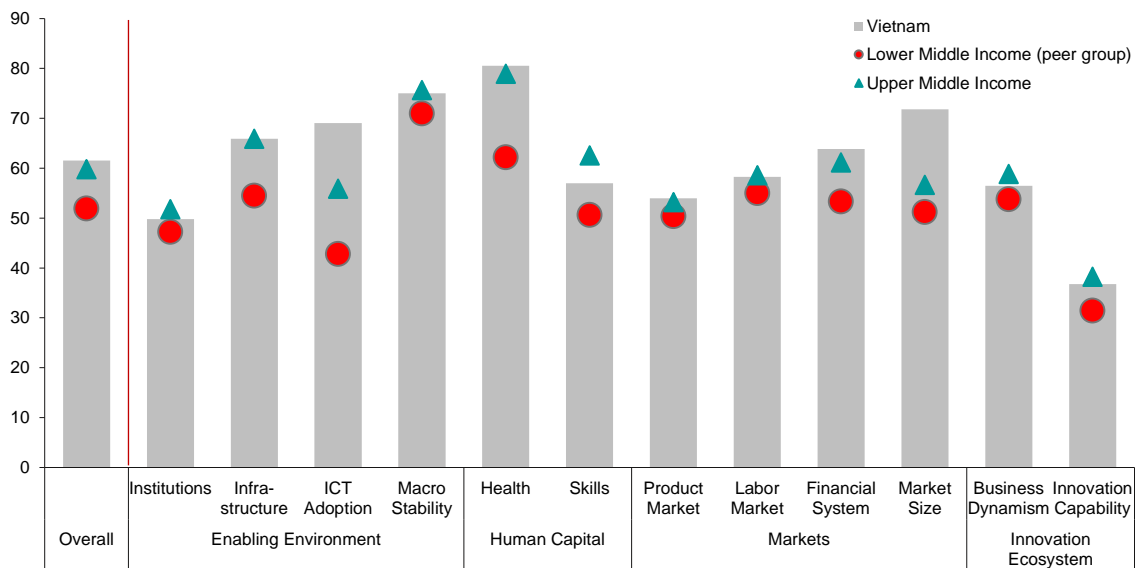
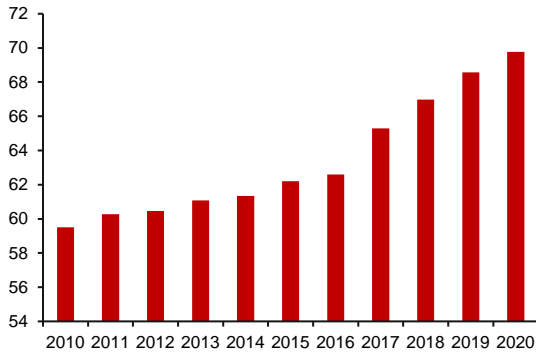


Figure 38. Global Competitiveness Index, 2019
(Score 0-100 [best])



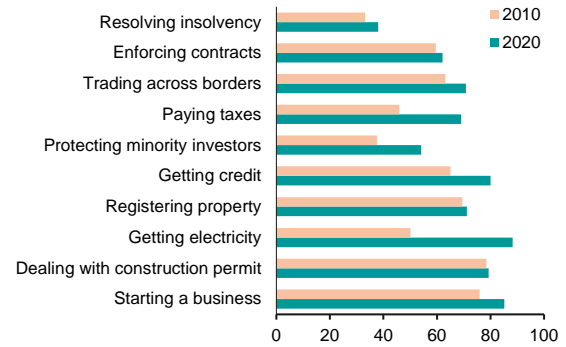
- Vietnam’s overall ease of doing business has improved significantly (Figure 39), with strong advances in tax administration, local financing and electricity supply. In contrast, some institutional indicators show very slow improvements, such as resolving insolvencies and enforcing contracts (Figure 40).

Figure 39. Ease of Doing Business Index
(Score 0-100 [best])



Source: World Economic Forum

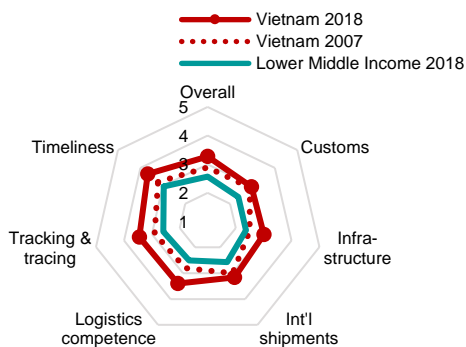
Figure 40. Ease of Doing Business by Category, 2020
(Score 1-5 [best])



Source: World Bank

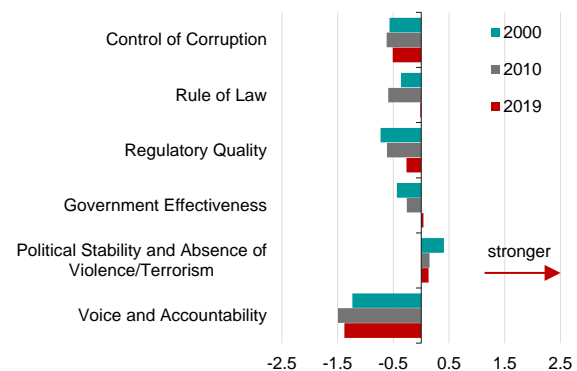
- According to the World Bank’s Logistics Performance Index, Vietnam’s global ranking jumped from 64th in 2016 to 39th out of 167 countries in 2018, benefitting from not only its access to sea but also the government’s efforts to simplify administrative procedure. It stood out as a top-performer among lower-middle-income economies in all of the six criteria—customs, infrastructure, international shipments, logistics competence, tracking and tracing, and timeliness (Figure 41).
- In contrast, the World Bank’s Worldwide Governance Indicators suggests that Vietnam’s overall governance—consisting of the traditions and institutions by which the authority is exercised (Kaufmann et al., 2010)—has more room for improvement in order to boost TFP growth. It is worthwhile to note that Vietnam has made good progress at least in two pillars—regulatory quality and government effectiveness—over the past two decades (Figure 42).

Figure 41. World Bank Logistics Performance Index
(Score 1-5 [best])



Source: World Bank

Figure 42. Worldwide Governance Indicators, 2020
(Score -2.5 to +2.5 [strongest])



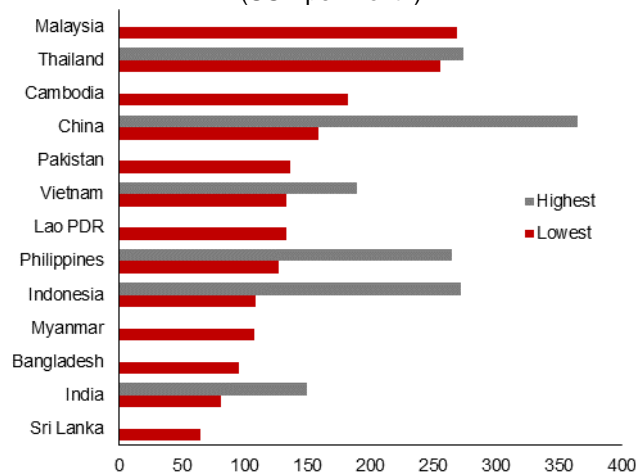
Source: World Bank

V. Push and Pull Factors for Vietnam's FDI

28. **A number of push and pull factors underlay the FDI patterns that have played out in Vietnam.** Over the past few decades, Vietnam has benefited significantly from favorable external conditions, or push factors, as well as Vietnam's attractive domestic conditions, or pull factors. Push factors were primarily developments occurring in other countries in the region and global trade environment, which pushed some businesses to shift their production locations away from exiting places. Meanwhile, Vietnam itself has become more attractive in the eyes of foreign investors due to a host of domestic factors, some of which are more policy-driven than others.

29. **One of the main push factors for the influx of FDI has been rising wages in China and other regional economies.** China's ascent during 2000s to become the world's preeminent manufacturing hub was enabled by a number of policy measures as well as macroeconomic conditions, with relatively low wages being one of the key facilitating conditions. However, as the country's income level increased, so did wages, which eroded the cost competitiveness of some manufacturers located in China and spurred many to relocate to countries with lower labor costs (Figure 43). Similarly, as income level of other regional countries such as Thailand and Indonesia increased, labor-intensive industries in those countries found it advantageous to look for locations with lower wages.

Figure 43. Minimum Wages, 2019
(USD per month)



Source: Cambodia's Ministry of Labor and Vocational Training; AMRO staff calculations

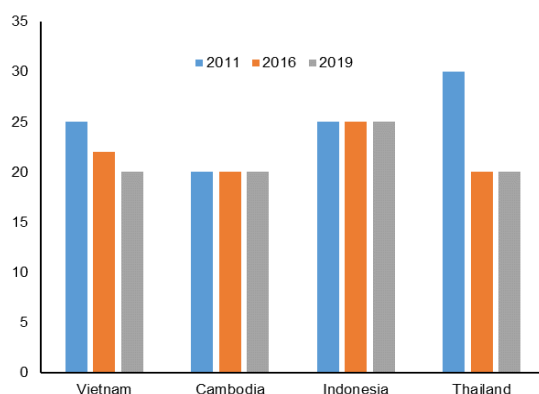
30. **Against this backdrop, Vietnam's attractive labor costs and relatively skilled workforce constitute one of the major draws for foreign investors.** Thanks to a favorable demographic profile, with almost 60 percent of the population being under 35 years of age, the relatively abundant supply of labor has allowed Vietnam's wages to remain competitive, especially compared to other regional countries. Moreover, the country's continued emphasis on education investment, as reflected in remarkable PISA scores among Vietnamese secondary school students, has increased the supply of relatively skilled labor, which is lacking in some competitors. As the quality of the workforce continues to improve, so does Vietnam's ability to pull in FDI, especially in industries that increasingly demand technological know-how, such as the electrical and electronics industry.

31. **U.S.-China trade tensions and the associated global supply chain restructuring have helped accelerate the flow of FDI into Vietnam.** Since the U.S. began imposing tariffs

and other trade barriers on China in 2018, a number of multinational firms in China have announced or begun plans for relocating some of their production facilities, if not all, to other countries to maintain cost-competitiveness. They often look for a place not far from China, enabling convenient shipment of Chinese raw materials and intermediate inputs for further processing and assembly. One of these examples, as mentioned in Box B, is Apple, which is shifting nearly 30 percent of its wireless headphone production from China to Vietnam.

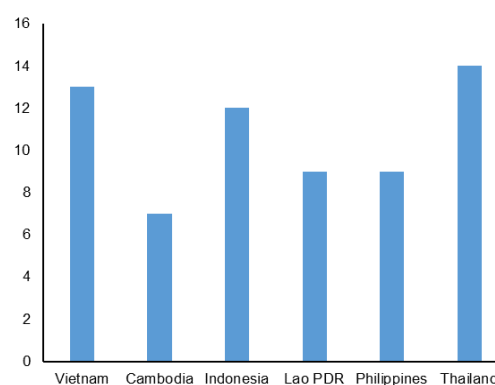
32. Comprehensive policy efforts by the Vietnamese government have created a favorable environment for foreign investors. Understanding FDI's contribution to economic development, the Vietnamese authorities implement a wide range of measures to improve business environment and place great emphasis on investment facilitation for foreign companies, especially large ones. Assistance is provided in various areas, ranging from land acquisition and registration to export and import licensing procedures.¹⁷ Additionally, reduction in corporate income tax rates over the past several years (the current rate is 20 percent) and generous tax breaks—such as for companies investing in high-tech sectors, certain industrial zones, and underdeveloped socio-economic regions—help ensure cost-competitiveness for foreign companies operating in Vietnam (Figure 44).

Figure 44. Corporate Income Tax Rates in Vietnam and Select Regional Countries
(Percent)



Source: KPMG; and AMRO staff calculations

Figure 45. Number of FTAs Signed and In Effect, 2020



Source: ADB Asia Regional Integration Center; AMRO staff calculations

33. Moreover, Vietnam's proximity to key regional markets and fast expanding free trade agreements (FTAs) have proven beneficial in attracting FDI. With China as a northern neighbor, Vietnam possesses easy access to one of the world's largest consumer markets as well as one of the world's major suppliers of intermediate inputs. The country is also well connected to Japan and Korea, which are increasingly outsourcing parts of their supply chains to Vietnam, taking advantage of proximity and convenient shipping routes off Vietnam's extensive shoreline on the South China Sea. In addition to Vietnam's geography, its own initiative to expand the market through FTAs, particularly with countries and regional blocs with large market potentials, have made the country more competitive as a production hub (Figure 45). In January 2019, the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), came into force, and in August 2020, the EU-Vietnam Free Trade Agreement (EVFTA) became effective.¹⁸ It is important to note that these so-called

¹⁷ For example, the government officially launched a customs priority programme for enterprises in 2013 (Circular 86/2013/TT-BTC), which simplifies administrative procedures for participating enterprises, for example through reduction in paperwork and required inspections.

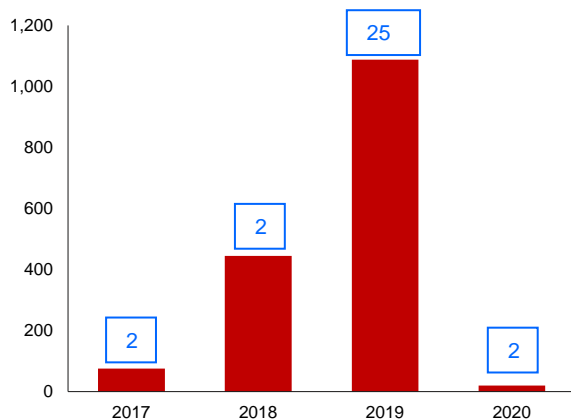
¹⁸ CPTPP will give Vietnam preferential access to eleven countries in the Asia-Pacific region, including large markets such as Mexico and Australia. Under EVFTA, import tariffs imposed by the EU have been eliminated for 85.6 percent of the existing tariff

“new-generation FTAs,” which tend to be more comprehensive than the older variants, also brings risks and challenges, for example the agreements’ requirements on labor and environmental standards, some of which are still lacking in Vietnam.

34. **More recently, the COVID-19 outbreak has presented Vietnam with an additional push factor, as it underscores the need for a more resilient production network in light of supply disruptions and restricted access to key markets.** As border control measures were imposed in order to limit the contagion, a large number of firms whose production relied on imported intermediate input were suddenly cut off from their supply network and hence unable to continue operating. Moreover, with tightened border controls, many firms with high dependence on certain countries as final sources of demand experienced difficulty in exporting to those countries. These trade bottlenecks thus served as a further impetus for firms to diversify their production base, with Vietnam as one of the most promising countries to which to co-locate/relocate production.

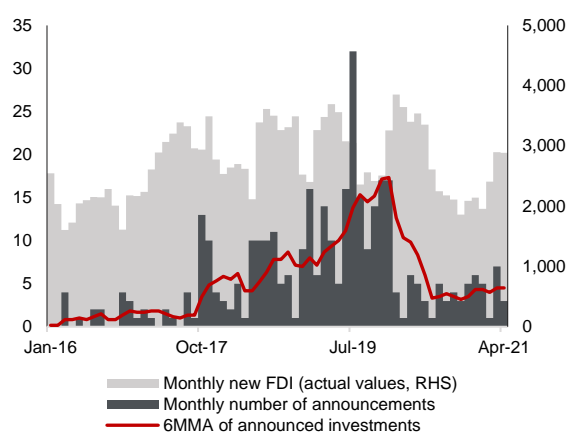
35. **This is consistent with the increase in announced co-location projects towards Vietnam since 2018, as uncertainty in the external environment heightened.** Vietnam was among the top destinations of “diverted FDI” in the ASEAN+3 at the height of the U.S.-China trade tensions (AREO, 2020). In 2019, around USD 1 billion worth of co-location plans were announced, from only USD 76 million in 2017 (Figure 46). Vietnam also benefits from relocation of FDI—a major example was the estimated USD 144-million move of LG Electronics, when it initially shifted its smartphone manufacturing plant from Korea to Vietnam in 2019.¹⁹ While the COVID-19 pandemic has somewhat stymied future investor plans (Figure 47), actual FDI inflows appear to have weathered the pandemic well, underscoring Vietnam’s continuing ability to pull in investment.

Figure 46. Announced Co-location Projects Directed towards Vietnam
(Millions of USD)



Source: Orbis CrossBorder Investment database; AMRO staff calculations
Note: Figures in boxes are the number of announced co-location projects during the year. Note that announced projects do not necessarily materialize, e.g. these may be cancelled or postponed.

Figure 47. Monthly FDI Inflows and Announcements of New Projects towards Vietnam
(Number of announcements; Millions of USD)



Source: National authorities via Haver Analytics; Orbis CrossBorder Investment database; AMRO staff calculations

lines, representing 70.3 percent of Vietnam's exports to the bloc. Within the next seven years, tariff elimination will cover 99.2 percent of the existing tariff lines, representing 99.7 percent of Vietnam's exports to the bloc.

¹⁹ The move was reportedly to reduce losses in its mobile communications division (Yang and Park, 2019). However, in April 5, 2021, the company has announced that it will be closing its mobile business unit completely by July of the same year. As of April 14, 2021, LG Electronics is still seeking local buyers for its Hai Phuong smartphone plant.

VI. Conclusion

36. **Vietnam has successfully transformed into a manufacturing-oriented economy, supported by stronger GVC participation over the past decades.** More than half of Vietnam's gross exports in value-added terms were involved in GVC network in 2017 via either direct or indirect channels, mainly led by low-technology manufacturers. Vietnam has been able to position itself as a final assembly hub using foreign-sourced intermediate inputs. However, its integration into more complex GVC manufacturing activities has been limited. Moving forward, the rise of new competitors among other low-income economies may weaken Vietnam's current GVC position which is specialized in downstream, simple manufacturing activities.

37. **Strong linkages with the FDI sector will enable domestic enterprises to enhance their GVC participation.** Inflows of foreign direct investments, especially in manufacturing sector, were followed by higher exports and imports, strengthening Vietnam's participation in GVCs, in particular through backward linkages. After moving to Vietnam, however, multinational manufacturers, especially those producing high-end products, continues to rely heavily on foreign sources for inputs—rather than from domestic enterprises—which is consistent with existing evidence that domestic firms have a weak presence in major supply chains (Tong et al., 2019). Limited capacity of domestic firms and slow productivity spillovers from large FDI firms have been blamed for the low economy-wide benefits of FDI. Upgrading the capacity of the domestic supporting industries and strengthening domestic-foreign firm linkages will increase the spillover benefits to Vietnam going forward.

38. **Amid the post-pandemic GVC reconfiguration, FDI policies need to be carefully aligned to Vietnam's development strategy.** Vietnam appears to have successfully weathered the COVID-19 pandemic impact on trade and investment activities. Realizing the vulnerabilities of existing supply chain network, several multinational companies, especially those in electronics and textiles businesses, are now moving or diversifying their production facilities to Vietnam and other ASEAN countries, which could further strengthen Vietnam's GVC participation. Amid this re-configuration of global supply chains, there should be scope for Vietnam to take advantage of these ongoing changes to propel Vietnam up the production value chain with greater domestic companies' participation. Additionally, recent increases in service sector FDIs, such as in ICT, telecommunications, retails, and financial intermediation, could provide new opportunities for Vietnam to participate in the higher value tiers of GVCs. A deliberate strategy to attract FDIs which are open to engaging domestic firms in providing intermediate inputs would be needed to complement policies to develop and support the domestic suppliers.

39. **To gain traction in its growth momentum spurred by FDI and GVC participation, Vietnam should continue to strengthen the domestic business sector and human capital.** The influx of FDI and intensified GVC participation have closely interacted with each other, contributing to Vietnam's rapid economic growth over the past decade via various channels.

- Capital stock accumulation, accelerated by strong FDI inflows, played a pivotal role in sustaining Vietnam's high growth momentum. However, with the increasing share of domestic private firms in gross capital formation, the authorities should take measures to boost their capacity to identify appropriate investment opportunities and improve their productivity.

- Vietnam's competitive labor costs and a relatively skilled workforce have attracted many foreign investors to establish their production facilities in Vietnam, transforming the country into a new global assembly hub. Given its relatively young population, however, Vietnam still has great potential in human capital. In order to capitalize on its young labor force and boost its labor productivity, Vietnam needs to upgrade tertiary education system and strengthen technical and vocational programs. In addition, long-term strategies are needed to ensure a sufficient supply of skilled labor matching the market needs, while coping with the looming demographic challenges of rapidly aging population and declining labor force in the next 20 years.
- A recent pick-up in total factor productivity growth has benefited not only from FDI firms' strong investments but also from the government's continued commitment to enhance business environments as reflected in Vietnam's strong performances in various country competitiveness indicators. However, the country's institutions and governance still have relatively large room to improve, which will be increasingly important going forward.

40. **Evolving push and pull factors require the authorities' flexible but well-planned policy responses to maintain Vietnam's attractiveness as an investment destination.** As Vietnam's continues its strong economic development, some of the structural pull factors may weaken, which requires the government's strategic response. For example, as its per capita income rises, Vietnam's labor cost competitiveness will gradually diminish, especially with declining labor force. Also, the supply of medium- to high-skill labor may keep pace with the increase in market demand as Vietnam moves up the global value chain. Meanwhile, a sudden change in global economic and trade environment could bring a substantial change in GVC evolution and FDI pattern. Vietnamese authorities need to remain vigilant of the evolving push factors potentially affecting Vietnam's strength and attractiveness, and be ready to adjust their policies as needed.

References

- Anderer, Christina, Andreas Dür and Lisa Lechner. 2020. "Trade Policy in a 'GVC World': Multinational Corporations and Trade Liberalization". *Business and Politics* 22 (4): 639-666.
- ASEAN-Japan Centre. 2020. "Global Value Chains in ASEAN: Viet Nam." *Paper 11*. May. https://www.asean.or.jp/en/centre-wide-info/gvc_database_paper11/
- Asian Development Bank. 2015. "Part IV - Global Value Chains Indicators for International Production Sharing", *Key Indicators for Asia and the Pacific 2015*, October 2015. <https://www.adb.org/sites/default/files/publication/175162/gvc.pdf>
- Asian Development Bank. 2020. Multi-Regional Input–Output Database. <https://mrio.adbx.online/>
- Aslam, Aqib, Natalija Novta, and Fabiano Rodrigues-Bastos. 2017. "Calculating Trade in Value-added". *IMF Working Paper No.17/178*. International Monetary Fund. <https://www.imf.org/en/Publications/WP/Issues/2017/07/31/Calculating-Trade-in-Value-Added-45114>
- Barro, Robert and Jong-Wha Lee, 2013, "A New Data Set of Educational Attainment in the World, 1950-2010." *Journal of Development Economics*, vol 104, pp.184-198.
- Cheng, Ting-Fang and Lauly Li. 2020. "Apple to produce millions of AirPods in Vietnam amid pandemic." *Nikkei Asia*. May 8.
- Das, Koushan. 2018. "Relocating to Vietnam to Mitigate the Effect of the US – China Trade War" *Vietnam Briefing*, Dezan Shira and Associates. August 31. <https://www.vietnam-briefing.com/news/relocating-to-vietnam-to-mitigate-the-effect-of-the-us-china-trade-war.html/>
- Fernandes, Ana, Hiau Looi Kee, and Deborah Winkler. 2020. "Determinants of Global Value Chain Participation: Cross-Country Evidence." *Policy Research Working Paper 9197*. World Bank, Washington, DC. <https://openknowledge.worldbank.org/handle/10986/33519>
- Fruman, Cecile. 2016. "Why Does Efficiency-Seeking FDI Matter?" World Bank, *Private Sector Development Blog*, Washington. February 5. <https://blogs.worldbank.org/psd/why-does-efficiency-seeking-fdi-matter>
- Hiep, Le Hong. 2020. "Vietnam's Over-reliance on Exports and FDI." *Perspective 2020* (96). ISEAS Yusof Ishak Institute. September. <https://www.iseas.edu.sg/articles-commentaries/iseas-perspective/2020-96-vietnams-over-reliance-on-exports-and-fdi-by-le-hong-hiep/>
- Hollweg, Claire H., Tanya Smith, and Daria Taglioni, eds. 2017. *Vietnam at a Crossroads: Engaging in the Next Generation of Global Value Chains*. Directions in Development. Washington, DC: World Bank. <https://openknowledge.worldbank.org/handle/10986/26215>
- Hummels, D., Ishii J. & Yi, K.M. 2001. "The Nature and Growth of Vertical Specialization in World Trade." *Journal of International Economics*, 54, pp. 75-96.

- Ignatenko, Anna, Faezeh Raei, and Borislava Mircheva. 2019. "Global Value Chains: What are the Benefits and Why Do Countries Participate?" *IMF Working Papers* 19/18. International Monetary Fund, Washington, DC.
<https://www.imf.org/en/Publications/WP/Issues/2019/01/18/Global-Value-Chains-What-are-the-Benefits-and-Why-Do-Countries-Participate-46505>
- Jhaveri, Aakash. 2020. "Google Pixel 4a manufacturing to move to Vietnam." *TechRadar*. March 4.
- Kataoka, Sachiko, Vinh, Le Anh, Kitchlu, Sandhya, and Inoue, Keiko. 2020. Vietnam's Human Capital: Education Success and Future Challenges. World Bank, Washington, DC.
<https://openknowledge.worldbank.org/handle/10986/34316>
- Kaufmann, Daniel, Aart Kraay and Massimo Mastruzzi. 2010. "The Worldwide Governance Indicators: A Summary of Methodology, Data and Analytical Issues". *World Bank Policy Research Working Paper* No. 5430.
http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1682130
- Koopman, R. Wang Z. & Wei, S. 2014. "Tracing Value-Added and Double Counting in Gross Exports." *American Economic Review*, 104(2): 459-94.
<https://www.aeaweb.org/articles?id=10.1257/aer.104.2.459>
- Kowalski, Przemyslaw, Javier Lopez Gonzalez, Alexandros Ragoussis and Cristian Ugarte. 2015. "Participation of Developing Countries in Global Value Chains: Implications for Trade and Trade-Related Policies." *OECD Trade Policy Papers* 179. OECD Publishing, Paris. May.
https://www.oecd-ilibrary.org/trade/participation-of-developing-countries-in-global-value-chains_5js33lfw0xxn-en
- Martínez-Galán Enrique and Maria Paula Fontoura. 2018. "Global value chains and inward foreign direct investment in the 2000s." *The World Economy* 42 (1): 175-196. May.
- Psacharopoulos, George and Patrinos, Harry, 2004. "Returns to Investment in Education: a Further Update", *Education Economics*, 12, issue 2, p. 111-134,
- Psacharopoulos, George and Patrinos, Harry, 2018. "Returns to Investment in Education: A Decennial Review of the Global Literature". *Policy Research Working Paper* No. 8402. World Bank, Washington, DC.
<https://openknowledge.worldbank.org/handle/10986/29672>
- Samsung. 2020. "Samsung Begins Construction of a new Research and Development Center in Vietnam." Press Release. March 2.
- Samsung. Undated list. "[Listed in order of] Name of suppliers in 80% of Samsung Electronics' transaction volume who agreed to be disclosed."
<https://www.samsung.com/us/aboutsamsung/sustainability/supply-chain/supplier-list/>
- Tong, Yee-Siong, Ari Kokko, and Adnan Seric. 2019. "Linking FDI and local firms for global value chain upgrading: Policy lessons from Samsung mobile phone production in Viet Nam." *UNIDO Working Paper* 5/2019. UNIDO, Vienna.
<https://www.unido.org/api/opentext/documents/download/15784588/unido-file-15784588>

- Viet Nam News. 2020. "Viet Nam targets private-sector development", *Viet Nam News*, November 9, 2020
<https://vietnamnews.vn/economy/804438/viet-nam-targets-private-sector-development.html>
- Wang, Zhi, Wei, Shang-Jin and Zhu, Kunfu. 2018. "Quantifying International Production Sharing at the Bilateral and Sector Levels", *NBER Working Papers* No 19677, National Bureau of Economic Research, Inc.
<https://EconPapers.repec.org/RePEc:nbr:nberwo:19677>.
- World Bank Group. 2017. "Vietnam: Enhancing Enterprise Competitiveness and SME Linkages: Lessons from international and national experience." World Bank, Washington, DC.
<https://openknowledge.worldbank.org/handle/10986/28488>
- World Bank Group. 2020a. "Foreign Direct Investment, Net Inflows." World Development Indicators.
- World Bank Group. 2020b. "Global Productivity: Trends, Drivers and Policies", edited by Alistair Dieppe, World Bank, Washington DC.
<https://www.worldbank.org/en/research/publication/global-productivity>
- Yang, Heekyong, and Ju-min Park. 2019. "LG Electronics to suspend mobile phones production in South Korea this year: Yonhap" Reuters, April 24.
<https://www.reuters.com/article/us-lg-elec-mobile/lg-electronics-to-suspend-mobile-phones-production-in-south-korea-this-year-yonhap-idUSKCN1S0104>



Address: 10 Shenton Way, #15-08

MAS Building, Singapore 079117

Website: www.amro-asia.org

Tel: +65 6323 9844

Email: enquiry@amro-asia.org

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