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# Underdevelopment and unregulated markets: why free markets do not lead to catching-up\*

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*After World War II, only a few developing countries were able to catch up to the real GDP per capita levels prevailing in developed countries. These successful countries in almost all cases were in Asia and did not follow the free-market doctrine in the tradition of the Washington Consensus. There must be theoretical explanations as to why underdevelopment is reproduced and most countries in the world do not catch up. This essay reviews different economic approaches that attempt to explain the lack of convergence. The aim is to explain why neither trade based on comparative advantages, nor on economies of scale, nor in global value chains, can cure the lack of sufficient productivity development. The essay will also cover special features like negative terms-of-trade effects, abundance of scarce resources, and premature de-industrialisation. Also distorted financial systems, high inequality, and restrictions on macro-economic demand management are briefly discussed. As most developing countries suffer from several of these factors, this approach can explain why development is only possible with the support of comprehensive regulatory government policies and a change in global governance.*

**Keywords:** *underdevelopment, financial system, free trade, inequality, Keynesian paradigm, Washington Consensus*

**JEL codes:** *B50, F40, O11*

## 1 INTRODUCTION

The neoliberal globalisation model, which started in the 1980s, promised a catching-up of developing countries. It included policies to deregulate national and international financial markets, push for free trade, make labour markets more flexible, privatise state-owned banks and enterprises, change corporate governance towards a shareholder value system, allow for stronger and increasingly dominant multinational companies, and so on. These policies led, among other things, to financialisation, including a more important role of financial markets in the economy and a stronger position of agents in financial markets (Hein/Dodig 2015). These developments took place alongside the weakening of trade unions. Higher economic instability, higher inequality of income and wealth distribution and increasing precariousness of living conditions in large segments of society became a hallmark of the new type of capitalism. International institutions recommended – and in many cases forced – developing countries to follow policies in line with the neoliberal globalisation model. These policies were summarised under the label Washington Consensus (Williamson 1990). Paul Krugman (1995: 29) explained the Consensus in the following way: ‘It is

\* This paper partly draws on Herr/Ruoff (2018). For many helpful comments and debates I thank Heike Joebges.

the belief that Victorian virtue in economic policy – free markets and sound money – is the key to economic development. Liberalize trade, privatize state enterprises, balance the budget, peg the exchange rate, and one will have laid the foundations for an economic take-off. Even though most developed countries followed the Washington Consensus recommendations to varying degrees, convergence was limited, just as it was in the decades prior to World War II. The few countries that successfully managed to reduce the gap with developed countries did not follow Washington Consensus policies.

Section 2 provides an empirical overview of the catching-up process since 1960. Section 3 discusses inequality and underdevelopment. In Section 4 presents why the integration into the global trading system has not contributed to adequate productivity developments in developing countries. Section 5 concentrates on distorted financial systems and the resulting restriction of demand stimulation. In the final Section 6, conclusions are drawn.

Overall developing countries suffer from a lack of productivity development and a lack of sufficient GDP growth. These factors cannot be separated, as some factors influence productivity development and GDP growth at the same time and – according to Verdoorn's law – there is a close relationship between GDP growth and productivity development (Thirlwall 2014).

## 2 EMPIRICAL DEVELOPMENTS

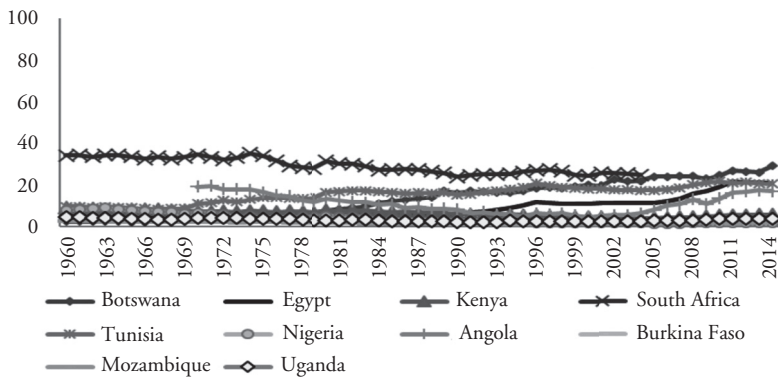
In this paper, economic convergence refers to convergences in real GDP per capita. Real GDP per capita in the different countries will be compared with real US GDP per capita. Real GDP per capita reflects mainly productivity levels and the innovative power of countries. Real GDPs per capita are very rough indicators of economic development as they do not include income distribution, ecological dimensions, or the significance of the non-market sector in an economy. However, they give an indication of the unequal development of the world economy over past decades. Economic catch-up in a developing country is only possible if productivity increases are higher than in the developed world over a long period of time.

### 2.1 Little catching-up in real GDP per capita

In Figure 1, it is shown that in African countries there was very limited convergence.<sup>1</sup> There was some positive development in Botswana, Tunisia and Egypt, including developments to levels of around 20 per cent of US real GDP per capita. South Africa reduced its real GDP per capita in relation to the US. In countries like Uganda or Nigeria, there was no convergence, in spite of their very low real GDP per capita level. Convergence in Latin America was overall higher than in Africa and reached levels of 30–40 per cent of real US GDP per capita (Figure 2). But most countries did not catch up. Very slow convergence is shown in countries like Brazil and Chile. Figure 3 (p. 222) shows the development in South Asia. In these countries, the real GDP per capita level stagnated at around 10 per cent of real US GDP per capita with some moderate improvements in India.

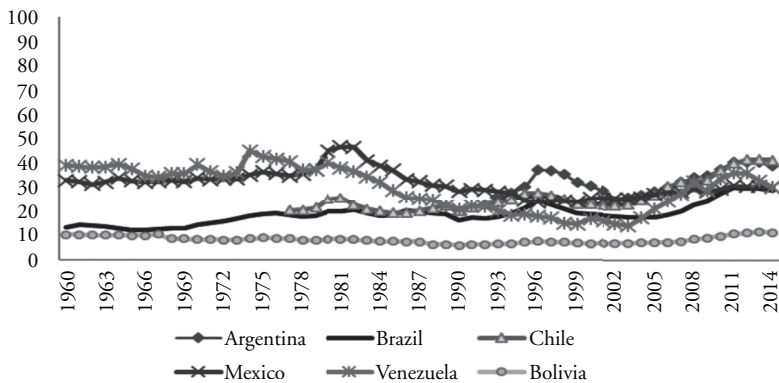
For some Asian countries catching-up can be observed (Figure 4, p. 222). Starting from a low level in the 1960s, Malaysia reached a level of around 40 per cent of real US GDP per capita, followed by Thailand (around 30 per cent) and Indonesia (below 20 per cent). The Philippines has been stagnating at a 10 per cent level. Vietnam

1. It should be kept in mind that the absolute difference between a country and the US increases when the percentage of convergence remains the same.



Source: Penn World Table (2017), calculating real GDP per capita (output-side real GDP at chained purchasing power parities in 2011 US dollar millions) divided by population (in millions). For an explanation of variables, see Feenstra et al. (2015).

Figure 1 Real GDP per capita in per cent of US real GDP per capita, selection of African countries

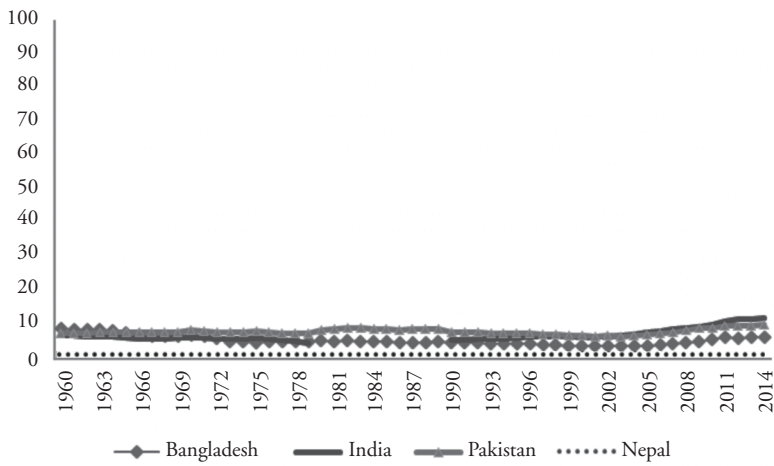


Source: See Figure 1.

Figure 2 Real GDP per capita in per cent of US real GDP per capita, selection of Latin American countries

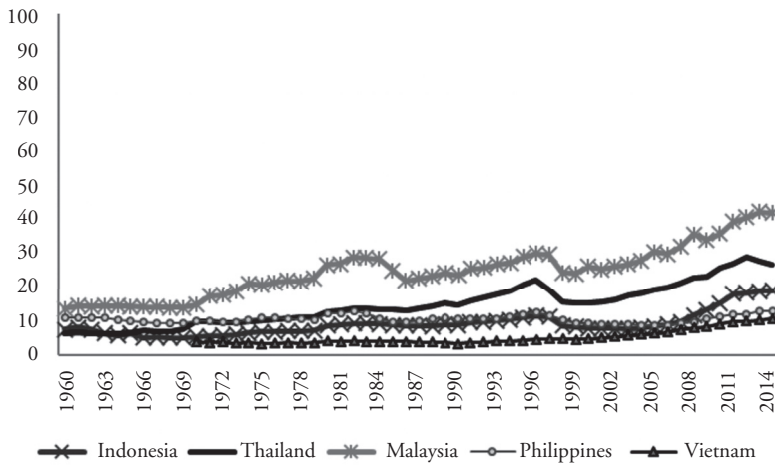
also reached the 10 per cent level, however starting later and at a very low level. The 'development stars' are shown in Figure 5 (p. 223): Singapore and Hong Kong reached real US per capita levels. However, these are city states and special cases. Taiwan and South Korea, starting at below 20 per cent, reached around 80 per cent of real US GDP per capita. Japan, with phenomenal development after World War II, has been stagnating since the 1990s. China, together with India the country with the highest population in the world, has reached around 20 per cent of real US GDP per capita, however, starting at a very low level.<sup>2</sup>

2. There are resource-rich countries with small populations, such as Saudi Arabia or Qatar. These countries have high real GDP per capita values based on high revenues from exporting scarce natural resources.



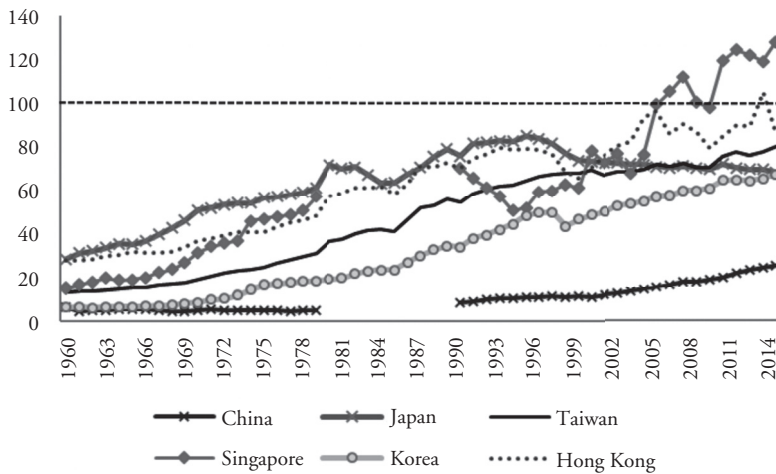
Source: See Figure 1.

Figure 3 Real GDP per capita in per cent of US real GDP per capita, selection of South Asian countries



Source: See Figure 1.

Figure 4 Real GDP per capita in per cent of US real GDP per capita, selection of Southeast Asian countries



Source: See Figure 1.

Figure 5 Real GDP per capita in per cent of US real GDP per capita, selection of countries with successful convergence

### 3 INEQUALITY AND UNDERDEVELOPMENT

Global inequality, which compares disposable income of people across the world irrespective of their nationality, can be measured with the global Gini coefficient. The global Gini coefficient for disposable income increased from 50 to 69.7 from 1820 to 1988, and dropped to 66.8 in 2008 and 62.5 in 2013 (World Bank 2016: 80f). The global Gini coefficient depends on income differences between countries and inequalities within countries. The reduction of the global Gini coefficient in recent years is based on the positive average income development of populous countries, such as China and to a lesser extent India. However, within-country inequality substantially increased. The World Bank calculated the population-weighted average national Gini coefficient to show this effect. This Gini rose sharply between 1988 and 1998 from 34 to 40, and then declined to 39 by 2013 (World Bank 2016: 82). Looking at the relative winners and losers in the world economy between 1988 and 2008, the middle classes in successful Asian countries, especially China, were the main winners. The main losers were the lower-middle classes in developed countries. If the global increase of world real GDP per capita between 1988 and 2008 is set 100, the top 1 per cent of the world received a share of 19 per cent, while the top 2–5 per cent received 25 per cent. Furthermore, measured in 2005 US dollars, in 2008 the top 1 per cent of the world had on average an annual income of US\$71 000, median income (around the income of the middle class in China) was US\$1400 and the income of the lowest decile was below US \$450 (Milanović 2016).

Inequality in a typical developing country is substantially higher than in developed countries. In 2013, in the group of industrial countries, the unweighted Gini coefficient was around 30. In East Asia and the Pacific, it had about the same level. In Eastern Europe and Central Asia, the Middle East and North Africa, it had values around

37. It was around 42 in Sub-Saharan Africa, and 49 in Latin America and the Caribbean (World Bank 2016: 11).

Heather Boushey and Carter Price (2014: 16), in a review of recent research, summarise their findings as follows:

This most recent work provides strong evidence that higher levels of income inequality are detrimental to long-term economic growth and that the policies some nations have taken to redress inequality not only do not adversely impact growth, but, instead, spur faster growth. Notably, this finding applies to both developed and developing countries.

Among others, Andrew Berg and Jonathan Ostry (2017) found in their econometric work that longer periods of high growth become unlikely if inequality becomes too high. In a comprehensive meta-analysis, Pedro Neves et al. (2016) concluded that there is a negative relationship between higher inequality and growth, especially in developing countries. It seems that short periods of growth are compatible with high or increasing inequality, but not long-term sustainable development. Furthermore, inequality at the bottom of society seems to be more problematic than at the top.

During recent decades, neoliberal policies increased inequality – or at least kept it very high – in developed and developing countries. Inequality in developing countries is usually very high, as all factors which influence income distribution stimulate high inequality: the profit share is high, wealth concentration is high, wage dispersion is high, and governments do not adopt policies aimed at redistribution (Gallas et al. 2016).

Previously, Gunnar Myrdal (1972: 102f) stressed the positive supply side effects of a more equal income distribution. First, if the reproduction of the power of labour for the poorer is improved (better health care, housing, education), productivity will increase. Second, mobility in society will increase with more equal income distribution, which will have positive productivity and social effects. Third, the rich are not always the best entrepreneurs; they tend to become a parasite class. Fourth, higher equality adds to social coherence. According to him, the build-up of welfare states in Western countries after World War II must be considered as one of the most profitable investments of societies, even though the gestation period of this kind of investment is long-term.

From the demand side, high inequality and high insecurity, which is connected with inequality, reduce consumption demand (Keynes 1936). High-income groups have a lower propensity to consume in comparison with low-income groups. Without sufficient consumption demand, which is by far the biggest demand element, overall demand, including investment demand, will suffer. A relatively equal income distribution and the inclusion of all societal groups in economic progress becomes a precondition for sustainable growth. For some countries, it might be possible to overcome the negative demand effects of inequality through high current-account surpluses, high indebtedness of private households or high fiscal deficits. But all these strategies are problematic for the sustainability of the growth model, difficult to achieve for developing countries, and destabilising for the world economy (Hein/Dodig 2015).

#### 4 INTEGRATION INTO THE GLOBAL TRADING SYSTEM AND LACK OF PRODUCTIVITY DEVELOPMENT

This section starts with explanations for trade based on comparative advantages and economies of scale, before concentrating on the effects of trade in global value chains. In addition, special problems of trade based on natural resources will be discussed. The section ends with a likely consequence: premature deindustrialisation.

#### 4.1 Free trade and underdevelopment

Adam Smith (1776) explained the benefits of trade through the concept of absolute advantages, for example based on natural resource richness or specific climate. If one country is more efficient in producing one thing and the other country in producing another, then the resulting trade patterns are obvious. David Ricardo (1817) developed his model of comparative advantages under the assumption that a country has a lower productivity level in all industries whereas the differences are different in different industries. Welfare in both countries can be increased when free trade is established. The more developed country concentrates on sectors with the highest technological advancement and the less developed country on sectors with the lowest disadvantages. Eli Heckscher (1919) and Bertil Ohlin (1933) assumed the same technology in all countries, but different factor endowments. The typical developing country has a relatively high stock of low-skilled workers and a low stock of capital, whereas the developed country has a relatively high stock of capital and a higher proportion of skilled workers. The developed country has a comparative advantage in capital-intensive productions with skilled labour and the developing country has a comparative advantage in labour-intensive productions with low skills.

Coming from a situation with no trade and switching to free trade in both the Ricardo model and the Heckscher–Ohlin model, far-reaching permanent distributional effects occur. In the developing country, unskilled workers benefit as the relative demand of unskilled workers increases; capital owners and skilled workers lose. In the developed country, the unskilled workers lose as their relative demand goes down, whereas capital owners and skilled workers win.<sup>3</sup> In addition, structural problems can cause under-utilisation of capital and labour for a long time. That the losers of globalisation are unskilled workers in the developed world fits with the empirical development in many countries. But in developing countries the unskilled did not gain from globalisation and in most cases the capital owners did not lose – as predicted by the model. We come back to this point later.<sup>4</sup> Surprisingly, deregulation of labour markets, which became widespread in Western countries from the 1980s on, is not used as an argument for changing wage dispersion. Deregulation might be the most important factor to explain the increasing low-wage sector in many developed countries (Herr/Ruoff 2016).

The Heckscher–Ohlin model has only limited relevance for explaining trade between developed and developing countries, as it misses the key difference between these countries, namely the different levels of productivity and innovative power. The Ricardo model cannot explain all types of international trade, but it delivers a powerful analysis of how the market works. First, the market leads to a concentration of low-tech and low-skilled productions in countries with a low level of technological knowledge. Second, the exchange rate protects countries with a low level of technological development. But the welfare implications of the model are a different story altogether, since they neglect particularly the consequences of free trade for the long-term development of productivity and the innovative power of nations.

The problem is that developing countries concentrate on low-tech and unskilled labour-intensive productions. The switch to free trade can reduce productivity in the developing country as promising industries with higher productivity do not have the opportunity to

3. It is further argued that a specific type of technological development reduced the demand for low-skilled labour.

4. To defend the idea that free trade is welfare-enhancing it is assumed that winners always and completely compensate losers. However, to compensate losers is in many cases politically complicated and probably even economically costly, for example when tax collection from winners is difficult.



develop and end up being transferred to developed countries. And the concentration on low-tech productions takes away the chance for *dynamic* productivity development. Positive learning effects and technological advances, including research and development, become concentrated in developed countries. This increases the innovative power in the developed world and leaves the developing countries lagging behind.

It is very unlikely that the market mechanism will lead to new industries in developing countries with high-tech and high value-adding comparable to developed countries (Rodrik 2004). First, there are information externalities. New products and new technologies or innovations involve a process of discovery. From its very character, new productions are risky, which makes it difficult for private investors to invest in them. To make matters worse, if a firm is successful, follower firms can, in many cases, easily imitate the successful firm. Second, there are coordination externalities. In many cases, a whole bundle of investment is needed, which goes far beyond the capacity of a single firm. A new product or technology may need new infrastructure (from transportation to new communication technologies) which cannot be handled by a single firm. Specific skills of employees and firms producing complementary goods or inputs may be needed.

Markets lead to a specialised division of labour amongst countries on the basis of their comparative advantages. However, this reduces the chances to catch up. Jean Imbs and Romain Wacziarg (2003: 64) found that successful countries ‘diversify most of their development path’. Different industries create synergies and increase the likelihood of successful innovations in new areas. Development has a lot to do with random self-discovery, which cannot be explained by comparative advantage (Rodrik 2004). In a similar direction, Mario Cimoli, Giovanni Dosi and Joseph Stiglitz (2009: 544) argue that emulation, as an important element of catching up, ‘is the purposeful effort of imitation of “frontier” technologies and production activities irrespectively of the incumbent profile of “comparative advantages”’. It often involves explicit public policies aimed at “doing what rich countries are doing” in terms of production profile of the economy’. Furthermore, historically, the rise of the now-developed countries was not a result of free trade (Chang 2002).

The New Trade Theory is closely connected with the work of Paul Krugman (1979). In this approach, the usual neoclassical assumption of constant returns to scale is substituted by the assumption of economies of scale (and scope), which are typical for industrial production. Economies of scale can be internal and firm-specific or external and caused by synergy effects in economic clusters. Assuming product differentiation and consumers’ preference for diversity economies of scale leads to a trade pattern in which for example one type of car is produced and exported in one country and another type of car is produced and exported in another country. External economies also explain geographical concentration of production, high growth of clusters and low growth in peripheral regions.

The New Trade Theory leads to undesirable consequences for the neoclassical paradigm. One of the consequences is that the model of pure competition no longer holds. Internal economies of scale imply that big firms can produce more efficiently than small firms. This leads to big companies and oligopolistic – or even monopolistic – structures and rent-seeking of powerful firms. In many cases in the New Trade Theory, the problem of oligopolistic and monopolistic firms is ignored by assuming monopolistic competition. Monopolistic competition is defined by product differentiation and low entry barriers. Under this assumption, international trade produces the usual results known from the Heckscher–Ohlin model. But apart from very specific assumptions, monopolistic competition is not compatible with internal economies of scale.

In an early paper, Krugman (1981) discusses the consequences of economies of scale for economic development which then becomes path-dependent. If a country has an advantage in manufacturing, for whatever reason, that country will develop a large industrial

sector, and benefit from economies of scale. A country with an original disadvantage, however, will end up producing primary goods, and will have no chance to develop, as economies of scale will prevent the establishment of a productive industrial sector. Most innovations need a high level of investment. Economies of scale and scope prevent small-scale innovative firms. Based on this analysis, it makes a lot of sense for governments to help domestic companies to exploit economies of scale, support technological developments that strengthen economies of scale and create technological monopolies, which are then protected with strict international patent laws. Such policies increase national welfare by building a strong industrial sector, creating even stronger external economies of scale, and improving the terms of trade for the own country by charging high export prices. This is all done to a large extent in developed countries, at the detriment, however, of development in the rest of the world.

#### 4.2 Free trade based on global value chains (GVCs) and underdevelopment

Since the 1990s, the characteristics of globalisation changed with the revolution in information and communication technology, reductions in transportation costs, and deregulation of international trade and capital flows. These developments allowed multinational companies to break down their production processes into different *tasks* and allocate these tasks all over the world. Offshoring in the form of subsidiaries or subcontracting is not a new phenomenon, but never before in history did it happen to such an extent.

According to UNCTAD (2013), around 60 per cent of global trade is trade in intermediate goods, and developing countries' share in global value-added trade is 40 per cent. Moreover, the role of transnational companies (TNCs) is enormous. UNCTAD (ibid.: X) finds that 'TNC-coordinated GVCs account for some 80% of global trade'. Similar findings are observed by the WTO (2013: 5), noting that 'the ten largest merchandise traders constitute nearly 60% of world trade and about half of world trade in intermediate goods. Many of these global value or production chains are organized by a multinational enterprise'.

Lead firms allocate tasks all over the world according to comparative advantages of countries. Developing countries have comparative advantages in low-tech and low-skilled sectors, while developed countries have comparative advantages in high-tech and high-skilled sectors (Feenstra 2010). In GVCs, developing countries do not only produce low-tech goods as in traditional trade, they produce possibly the low-tech tasks in the production of low-tech goods (Chi 2017). GVCs can result in a further reduction in the productivity level, narrower specialisation and can intensify the above-discussed lack of dynamic industrial development.

GVCs provide developing countries with the possibility of exploiting economies of scale in manufacturing, which would be difficult in the production of complete goods. And there is the hope that lead firms will transfer skills and technology to developing countries. For example, employees in GVCs with some higher technical and managerial skills can rotate to domestic firms. In addition, domestic firms may be able to copy technologies from foreign firms. Domestic firms can also be used as domestic suppliers and are trained by lead firms. However, even if lead firms transfer technology, this will only be technology that is associated with the production of low-tech tasks. In traditional manufacturing sectors (for example, garment, footwear) and agricultural products (for example, fruits, wood, coffee), local firms benefit from GVCs usually in terms of product upgrading (better or new tasks close to the old task) and process upgrading (new technologies or management methods to improve production of existing tasks), as these firms are often forced to comply with

overseas quality and social standards. Functional upgrading (shifting or extending the position in GVCs to more skilled activities) is rare, as the lead firms keep important know-how to themselves. Global buyers tend to divide their innovation activities between strategic ones with highest value-added performed in home locations and non-strategic ones outsourced. Upgrading in complex product sectors (for example, automobiles, electronics) is usually small and functional upgrading very unlikely. Overall the conclusion is that technology and skill transfers from subcontracting and even foreign direct investment (FDI) is limited (Humphrey/Schmitz 2002; Pietrobelli/Rabellotti 2004; Giuliani et al. 2005; Herr/Scherrer 2017).

GVCs lead to an interesting conclusion regarding wage dispersion. When tasks are classified from very low-skilled ones to very high-skilled ones, developing countries at a certain point in time take over certain low-skilled tasks and developed countries certain high-skilled tasks. If, based on improvements in transportation, communication or management techniques, developing countries now take over more tasks in *both* developed and developing countries, the relative demand for skilled workers increases and the unskilled are the relative losers (Feenstra/Taylor 2014: 199ff). This model fits the reality that wage dispersion worldwide increases or remains – especially in developing countries – at very high levels.

In GVCs, monopsonistic or oligopsonistic structures are dominant.<sup>5</sup> The concentration of the world's leading companies in a few countries is impressive. Using annual revenue as an indicator, in 2017 from the 500 biggest companies 132 are located in the US, 109 in China, 51 in Japan, and 29 each in Germany and France. The top five countries account also for 350 of the 500 biggest companies (PWC 2017). From the developing world only China managed to become a big player in the world economy. Buyers of tasks in developing countries have the market power to sharply reduce prices to a minimum. The lion's share of profits along the value chain is pocketed by the lead firms. 'Value crabbing' in GVCs must be seen as an important factor for increasing the profits of multinationals and increasing the profit share in developed countries (Milberg/Winkler 2013). In this context, a new global exploitation model has developed (Azarhoushang et al. 2015). Paul Krugman (1981) argues in this direction. As mentioned above, in cases of economies of scale, the market mechanism concentrates manufacturing in developed countries, and developing countries produce and export low-tech products with no or low economies of scale. In the second step of the analysis, Krugman allowed for FDI. Now big firms in developed countries have the incentive to transfer some mass productions of a low-tech nature to developing countries to cut costs. Profits earned in developing countries are transferred to developed countries and consumers benefit from low prices of products. As acknowledged by Krugman (1981), there are many similarities between this analysis and Wladimir Lenin's (1939) analysis on imperialism.

### 4.3 Secular negative terms-of-trade effects: the Prebisch–Singer hypothesis

Hans Singer (1949) and Raul Prebisch (1950) have made the argument that the production and export of primary commodities, such as cotton, rice, sugar cane, fruits, etc., leads in the long run to negative terms-of-trade effects for developing countries. The Prebisch–Singer hypothesis implies that developing countries in the long run must export

5. GVCs also are important among developed countries. In this case power asymmetries can be weaker or do not exist. An example is the manufacturing of engines by Rolls Royce for Airbus and Boeing.

quantitatively more primary commodities to get the same quantity of high-tech products produced in developed countries. This makes it more difficult to reach income levels comparable with developed countries.

There are four reasons why terms of trade deteriorate. First, primary commodities have lower price elasticities than manufactured goods. If prices decrease, for example for coffee, demand for these goods does not necessarily increase, particularly when compared to manufactured goods. Second, income elasticity for primary products is also relatively low. Products such as rice may be inferior goods which are less demanded with higher income. Third, technological developments in the field of synthetic substitutes and efficiency gains in reducing inputs of primary commodities, for example caoutchouc, tend to reduce the demand for primary commodities. Fourth, primary commodities are usually produced and sold in highly competitive markets, while manufacturing products are produced by multinational corporations which in many cases have monopsonistic and/or oligopolistic positions. Singer (2003), looking at long-term trends, found that prices for primary commodities dropped in relation to manufactured goods.

The shifting of low-value-adding tasks in GVCs to developing countries must be considered as a modern variant of the Prebisch–Singer hypothesis (Milberg/Winkler 2013).

#### **4.4 Free trade based on natural resources and underdevelopment**

Developing countries can have an absolute advantage in the extraction and export of natural scarce resources like oil, gas or rare earths. These resources are usually sold for prices much higher than their production costs and earn a rent which is not based on any merit principle. The richness of such natural resources very easily becomes a burden for development. One problem of natural resource richness is the so called ‘Dutch disease’. The term was coined in the 1970s, when offshore oil was found in the North Sea and the export of oil led to poor development of the previously dynamic Dutch manufacturing sector. Max Corden and Peter Neary (1982) argued that the discovery of natural resources and their extraction lead to a real appreciation and a loss of competitiveness for manufacturing. Countries exporting a lot of scarce natural resources cannot at the same time export a lot of manufactured goods. In these countries’ manufacturing sectors the exchange rate is then overvalued to such an extent that the sector has no chance to develop. Employment and technological spillovers of natural resource extraction are rather low. Growth may be high as long as natural resource prices are high, as the domestic non-tradable sector is stimulated by high revenues from natural resources. But the country is in danger of suffering in the long term from low productivity growth. Lastly, when the natural resources are used up or their prices drop, the resource-based development model collapses.

Natural resource prices are volatile, and have especially been so since the tendency towards financialisation during recent decades (Evans/Herr 2016). This exposes natural-resource-rich countries to frequent shocks. Even when natural resource revenues are usefully spent, there is the danger that projects associated with industrial or social welfare purposes cannot be finished if revenues suddenly run dry. Usually, natural-resource-rich countries have poor tax systems. This implies that losses incurred from declining natural resource prices cannot be quickly compensated. Last but not least, natural-resource-rich countries suffer from rent-seeking and high levels of corruption in many cases. In a number of resource-rich countries, firms that extract natural resources are owned by foreign

firms which transfer rents directly abroad. In the light of these problems, it becomes understandable why so many resource-rich countries suffer from Dutch disease and resource curse – from Nigeria, Angola and Venezuela to Iran or Russia. Norway, of course, is the big exception in this regard. Norway's success as an exporter of natural resources, however, is due to its good institutional framework and its policy to invest almost all of its oil revenues abroad to prevent overvaluation (Humphreys et al. 2007; Herr 2016).

Extensive development aid in the form of money inflows can lead to similar effects to Dutch disease, that is, an overvalued exchange rate and rent-seeking behaviour (Rajan/Subramanian 2005). High capital inflows and high remittances can also lead to Dutch disease effects.

#### **4.5 A likely consequence of free trade: premature de-industrialisation**

De-industrialisation is historically a normal phenomenon and reflects the fast increase of productivity in manufacturing and consumer preferences (Lawrence/Edwards 2013). This process of de-industrialisation happens in a number of developing countries at very low GDP per capita levels. According to Rodrik (2015), in the 1960s and 1970s, manufacturing employment in the United States, Japan, Germany, Britain, Italy, France, and other Western European countries peaked at income levels of around US\$14 000 (in 1990 US dollars) and employment of around 25 per cent or more of total employment. In contrast, in many developing countries, manufacturing peaks at income levels of US\$700 (in 1990 US dollars) and at maximum employment shares of around 15 per cent. For example, industrial employment in India peaked at around 12 per cent of total employment in 2002, in Indonesia at around 13 per cent in 2001, in Ghana at around 15 per cent in 1978, or in Zimbabwe at 5 per cent in 1985. Developed countries, and a small number of developing countries such as the Asian tigers or China, have comparative advantages and the capacity to produce manufactured goods for the whole world.

Following Nicholas Kaldor (1967), industrialisation is at the core of economic development. The industrial sector, as mentioned above, is usually the most dynamic sector and of key importance for the long-run productivity development of a country. It is questionable whether other sectors in developing countries have the capacity to ensure development to the same extent. Theoretically, high-quality services could take over this function. But service-led growth in high-value-adding activities is very skill-intensive and does not engage a substantial amount of low-skilled labour. In addition, it is unlikely that the employment dynamic of high-skilled services is sufficient to create the needed development (Dasgupta/Singh 2006).

Industrialisation is crucial for the development of large or medium-sized companies which offer employment for different skill levels. Without sufficient industrialisation, there is the danger that the economy remains dominated by only small and micro enterprises, which are to a large extent in the informal sector. These enterprises are no 'Schumpeterian enterprises' with high innovative power, but tend to remain 'poverty enterprise', with low productivity and minimal prospects for meaningful development (Rodrik 2015; Herr/Nettekoven 2017). For such a sector, the enforcement of labour laws, minimum wages, establishment of strong trade unions and employers' associations, collective bargaining, etc., remains difficult. The development of a working class and other modern mass organisations pushing for social reforms, including political reforms and democracy, becomes unlikely. And there is no social basis in the form of a working class for creating acceptable equal living conditions.

## 5 DISTORTED FINANCIAL SYSTEMS AND LACK OF SUFFICIENT DEMAND STIMULATION

### 5.1 Low quality of domestic currencies and distorted financial systems

The approximately 180 currencies in the world have different qualities and serve different functions. The quality of a currency depends on the trust that wealth owners (rich and poor households, firms, financial institutions) have in a currency. Trust depends on past and expected stability of the currency, which is expressed in a low inflation rate and stable exchange rate. Other important factors are the size of the currency area, the disposability of the currencies, and the political and social stability up to the military power of the money-issuing country.

As discussed by Fritz et al. (2018) in this issue, currencies of developing countries are mainly placed in the lowest layer of the resulting currency hierarchy. These low-quality currencies only partly take over national money functions. The low quality of currencies is shown by the degree of dollarisation (including euroisation, etc.). In the period 2007–2011, deposit dollarisation in Sub-Saharan Africa was 21.8 per cent, in Latin America and the Caribbean 25.2 per cent, in East Asia and the Pacific 19.0 per cent, in emerging European countries and Central Asia 45.7 per cent, in the Middle East and North Africa 11.4 per cent, and in South Asia 24.0 per cent (Mecagni et al. 2015). There are many countries with very high deposit dollarisation, with shares of 50 per cent or higher. Dollarisation is the capital flight of the small wealth owners. Big wealth owners in developing countries keep their monetary wealth outside their country. One can imagine that, in most developing countries, especially the ones following market-radical policies, much more than 50 per cent of monetary wealth is kept in foreign currency.

There are severe disadvantages when a country is not able to produce a currency which is sufficiently accepted (Chițu 2012; De Paula et al. 2017). First, the possibility of countries to earn seignorage shrinks. Second, the low quality of a currency leads to currency mismatch. Domestic financial institutions use domestic foreign currency deposits to give domestic foreign currency loans. Currency mismatch is also caused by foreign credit which in developing countries is almost exclusively dominated by foreign currencies (Eichengreen et al. 2007). Third, monetary policy is severely restricted in countries with low-quality currencies and real interest rates are relatively high. High interest rates reduce domestic investment and increase income inequality. Fourth, in countries with high currency mismatch and dollarisation, the ability for the central bank to act as a lender of last resort is limited.

Fifth, and probably most important, is the breakdown of a sustainable Keynesian–Schumpeterian credit–investment–income-creation–saving mechanism which is at the centre of economic development. Joseph Schumpeter (1934: 107) stresses that credit is created ‘out of nothing’ to finance investment and the ‘creation of purchasing power characterises, in principle, the method by which development is carried out in a system with private property and division of labour’. This implies that investment creates savings via stimulating production and income. One consequence of this analysis is that developing countries do not need foreign capital. Capital which is needed can be created by the domestic banking system. Developing countries need knowledge and new technologies, but they do not need foreign financial means to finance domestic investment.

When a central bank in a typical developing country refinances a stable domestically financed healthy expansion process by financing productive investment, monetary wealth in the domestic currency is endogenously created. In a typical developing country, 50 per cent or more of monetary wealth creation is exchanged in foreign currency.

This leads to an unacceptable depreciation of the domestic currency and, finally, a monetary policy which stops the economic expansion very early. By this process, long-term high GDP growth rates and convergence are suppressed. A domestic credit expansion can continue for some time, as long as the country can attract sufficient foreign capital inflows. But this leads to a fragile constellation.

Sixth, financial markets tend to produce boom phases with high credit expansions and asset price bubbles, sudden stops of credit expansion, and busts with credit contraction, asset price deflations and financial crises (Minsky 1982; Detzer/Herr 2015). Following the same logic, developing countries are regularly afflicted by international boom–bust cycles. During the boom phase, high capital inflows are usually combined with high domestic growth, asset price inflation and current-account deficits. Typically high capital inflows create high currency and maturity mismatch. When capital inflows come to a sudden stop, depreciation becomes unavoidable with its increasing effect on the real debt burden. Domestic financial crises, exchange-rate crises and collapse of asset prices lead to disastrous cumulative processes (Kaminsky/Reinhart 1999). Such boom–bust cycles can become very costly for developing countries and undermine long-term stable development.

## 5.2 Lack of aggregate demand management

The volume of aggregate demand, as well as its structure, can lead to crises and lack of development. Developing countries suffer typically from a lack of aggregate demand; they could produce more and employ more people if demand were higher. First, investment demand in many developing countries is suppressed by a distorted financial system, which is not able to deliver sufficient credit for a high investment dynamic. Second, high inequality in typical developing countries keeps consumption demand too low. Insufficient consumption demand also depresses investment, given that it makes no sense to build up production capacities when they cannot be used.

Developing countries also suffer from relatively low government demand, particularly compared with developed countries. In many developing countries, the tax system does not work. There might be a big informal sector which is difficult to tax; there might be the power of the elites which prevents a sufficient taxation of them. Low tax revenues lead to small government demand in per cent of GDP. High government expenditures fully financed by high taxes have an expansionary and stabilising effect on aggregate demand (Haavelmo 1945).

For developing countries, the room for expansionary fiscal policy via higher budget deficits is smaller than for developed countries. In many cases, high budget deficits in developing countries have to be financed by direct credits from the central bank or indirectly by banks which refinance themselves through the central bank. In both cases, additional monetary wealth is created. As big parts of additional monetary wealth are exchanged in foreign currency, the room for fiscal expansion is small. Hyperinflation in developing countries is usually triggered by high budget deficits which lead to a cumulative depreciation–wage–price spiral with even higher budget deficits (Robinson 1938).

The last demand element is net foreign demand. Increasing export surpluses increase domestic demand and can lead to export-led growth; increasing import surpluses can restrict domestic demand. Growth of developing countries can become constrained by the balance of payment (Thirlwall 2014). This is the case when a period of growth leads to increasing imports and current-account deficits which cannot be sustainably financed by capital inflows. The problem is that the use of the exchange rate to increase competitiveness and reduce the deficit is restricted. High currency mismatch can be an obstacle for depreciation.

But there are more difficulties to overcome. A nominal depreciation can trigger a depreciation–wage–price spiral. In cases of low price elasticities of exports and imports, the Marshall–Lerner condition might not be fulfilled and in turn a real depreciation could increase the trade deficit.<sup>6</sup> And the negative terms-of-trade effect of a real depreciation can cause political instability.

## 6 CONCLUSIONS

Economic thinking has produced a whole set of theoretical approaches to explain why unregulated markets do not lead to convergence between developed and developing countries. An important point is that countries can suffer from *several* of these drawbacks, showing how difficult a task it is for a developing country to catch up. Without heavy government interventions, development is not possible. This conclusion is not a plea for a planned economy or suppression of markets. It is a plea for a combination of government interventions and institutions *and* markets. Needed for development is a highly regulated type of capitalism in the tradition of John Maynard Keynes and Karl Polanyi. In such an approach, markets can play an important role, but they have to be embedded in comprehensive government regulations and institutions (see for example Stiglitz 2006; Dullien et al. 2011).

International trade and export orientation is recommendable for development, but not free trade, as this has the potential to reproduce underdevelopment. A high level of trade can be reached even with development-oriented trade regulations. An example is the first globalisation wave before World War I (Chang 2002). The support of entrepreneurship is important for development, but without comprehensive industrial policy, development is difficult to achieve. The challenge for industrial policy is to create an information flow and coordination mechanism between government and the enterprise sector, including civil society, to shape industrial policy and adjust it in case of mistakes (Rodrik 2004).

In traditional trade theory, more international trade increases world efficiency and thus leads automatically to higher production. The integration in the world market, the argument goes, also creates in developing countries higher production and more jobs. From a Keynesian perspective, such a mechanism is not guaranteed. Higher efficiency can lead to unemployment and unused production capacities. Only when sufficient aggregate demand (which is principally independent of efficiency) is created will higher efficiency lead to higher production. It is a different story, however, when a country is able to export more and realise higher export surpluses. In such a case, it can increase demand for domestic production. The problem, of course, is that not all countries in the world can have export surpluses and increase their production and employment in this way.

South Korea or Taiwan developed under a regime of strict capital controls, including highly regulated domestic financial markets, which delivered long-term credits and kept real interest rates low (Stiglitz/Uy 1996; Dullien 2009). China, after the start of reforms in 1978, to give another example, was able to establish a largely state-controlled credit–investment–income process protected by strict capital outflow and inflow controls (Herr 2010). FDI can under certain conditions support development; other types of capital flows can create serious problems for development.

This leads to more obstacles for development which have not been mentioned so far. Good government interventions imply the political will and ability to promote meaningful

6. The Marshall–Lerner condition shows that real depreciations only improve the trade balance if the absolute sum of export and import demand elasticities is greater than unity.



development policies including a more equal income distribution and inclusive growth. Elites in many countries may not be interested or capable of implementing policies which lead to convergence. They may be part of an international community with similar living styles, fashions and values. For them, a needed national project of development (including inclusive growth) may sound like an alien adventure, neither realistic nor preferable. Also, developed countries as well as international institutions may prevent or at least make it difficult for developing countries to follow policies which are in their interest. And there is one more important point. Developing countries are, on average, more severely affected by the impact of global warming and other ecological problems than developed countries. Moreover, they have less of a means to protect themselves against these developments.

Looking at all these problems, in the current global constellation, it seems to be realistic that some of the Asian countries especially will be able to catch-up, but many countries in the Global South will be left behind. For many countries, the barriers to catch-up are very high. Of course, a fundamentally different model of globalisation could improve the chances of creating a more coherent world economy.

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