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**Productive Capacities in
Asia and the Pacific***

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Abstract

The views expressed in this Working Paper are those of the author(s) and should not necessarily be considered as reflecting the views or carrying the endorsement of the United Nations. Working Papers describe research in progress by the author(s) and are published to elicit comments and to further debate. This publication has been issued without formal editing.

The paper provides quantitative estimates of the productive capacities of the countries in the Asia-Pacific region and their evolution in the past 25 years. It updates the results for 2009 presented in the ESCAP's Economic and Social Survey of Asia and the Pacific 2011 and details the methodology used to create the productive capacity index. It finds that, except from the region's developed countries and emerging developing economies, the majority of the countries in the Asia-Pacific region have productive capacities that are below the world's average. This paper also shows that has been very difficult for countries to improve their productive capacities when they start from lower levels. It also finds that while there has been convergence in productive capacity amongst countries that were initially above the average, countries that two decades ago had below average productive capacity have lagged further behind, which suggests increasing overall divergence.

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Keywords: Productive Capacity, Structural Transformation, Diversification, Economic Development

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Productive Capacities in Asia and the Pacific

Clovis Freire

1. INTRODUCTION

The importance of the transformation of productive capacities for countries' development has received growing attention through a series of United Nations reports that have argued that national and international policy should focus on developing productive capacities – and the related expansion of productive employment – for achieving sustainable and inclusive development (UNCTAD 2006, 2007, 2010, ESCAP 2011). Such an approach to development presents an alternative to the set of orthodox growth theories that have guided the policy discourse in the past 3 decades, and brings production and productive employment back to the development agenda.

This approach has been supported by recent research that has revealed empirical regularities between the transformation of productive capabilities and levels of development. Some of these new stylized facts suggest that, as they develop, countries diversify their production - they do not just keep producing more of the same. Moreover, not all goods are alike in terms of their impact on economic growth - some products facilitate an easier path towards more productive capacities and, as result, higher output than others. Given that, government policy has a fundamental role to play in transforming the productive capacities of a country.

This paper considers productive capacity as the set of capabilities available in a country to produce and market its output of goods and services. These capabilities include resource endowments (i.e. labour, physical capital, human capital, land), total factor productivity, mechanisms for the allocation of these endowments to specific uses, and any other factor that contributes to maximizing the output of the economy, including trade and transport integration, institutions, policies and regulations.

But how to measure the productive capacity of a country? If someone is given that task, should she look at the technology used by the country's firms and farms, the level of education of its population, or the level of capital available for production? Should she consider how the economic activities are interconnected, or how capable are the managers of those firms? And what about the policies, regulations and infrastructure; what should be the weights that she should assign to them? That seems to be a daunting task.

This paper presents a different approach. Instead of focusing on a particular element of productive capacities, it focuses on its result – the actual production. It uses a revised version of the method of reflections proposed by Hidalgo and Hausmann (2009) to obtain further information on the productive capacities of countries based on generalized measures of diversification.

This paper reviews some stylized facts on productive capacities and economic growth, takes stock of the productive capacities of countries in Asia and the Pacific and estimates its evolution in the past 25 years.

2. DIVERSIFICATION AND PRODUCTIVE CAPACITIES

Economic development is associated with the production of an evolving and expanding range of goods and services, not simply more of the same. This is one of the stylized facts that come out of recent literature on growth, trade and development. For example, a study by Imbs and Wacziarg (2003) shows that, as incomes increase, economies become more diversified. Such a pattern holds up to a fairly high level of income after which specialization seems to kick in. That result suggests that, for most of their development path, countries diversify and do not follow the expected pattern of specialization as predicted by Ricardian comparative advantage. The authors have shown that this empirical regularity is a robust feature of the supporting data and it has been supported by subsequent work by Klinger and Lederman (2004) and Carrere et al (2007) using disaggregated export data. Using highly disaggregated US trade data, Schott (2003) shows that US trading partners do specialize within products – when exporting the same product, rich nation export the varieties of higher unit value while poorer nations export the ones of lower unit value. But they do not specialize across products – rich nations export to the US many different products, including the products exported by poorer nations. Based on trade data disaggregated by unit price of the products, ESCAP(2011) shows that diversification within and across products occur in tandem and are both associated with an increase in total output.

The fact that development is associated with diversity of economic activities may have been washed out of the mainstream economic policy discourse in the past decades but it was not unnoticed by the development Economists of the past. As the Eric Reinert (2008, pp.95) concludes after reviewing the work of 17th century Economists on the wealthy city states of the day, “... it is as if these theorists said: if you wish to estimate the wealth of a city, count the number of professions found within its walls...the larger the number of professions, the wealthier the city”. The important message for developing countries is that concentrating on their current comparative advantage and to keep producing more of the same product-mix, is not the way to develop. That is a strategy only to increase the size of the pie given the current state of affairs as embodied in a country’s production possibility frontier. Thereafter, only by expanding production into new goods and services – increasing the range and diversity of its economic activities - that the country’s economy will grow and develop.

Another stylized fact presented in ESCAP(2011) is that economies that are more diversified tend to export products that are not very common, meaning that they are not produced by many other countries. This result remains robust to changes in the methodology used to classify similar products of different unit-values into different price categories. This empirical regularity is also presented and discussed in Hausmann and Hidalgo (2010) using three different trade classification systems. This new stylized fact suggests that, as they diversify, countries produce new goods that are not selected at random – these are new products that were traditionally produced by more diversified economies. This fact highlights the importance of emulating the production of more diversified economies for the process of development.

With countries producing more products, these products become more common. Countries, therefore, must continue to diversify even if to just keep up with the global economy that is co-evolving. The process of diversification is similar to the Red Queen's race described in Lewis Carroll's 'Through the Looking-Glass': "...it takes all the running you can do, to keep in the same place. If you want to get somewhere else, you must run at least twice as fast as that!". If countries do not diversify, they do not remain in the same position related to the other countries, they fall back.

Hidalgo and Hausmann (2009) develops a view of economic growth and development that gives a central role to the productive structure of a country's economy by interpreting trade data as a bipartite network in which countries are connected to the products they export (See *Appendix*, section 1). They use the structure of such network to quantify the set of capabilities available in the country using a method that they called "method of reflections". They also suggest that the measures that they use to infer the productive capacity of a country, which is called "economic complexity" by those authors, are correlated with the country's level of income, and that deviations from this relationship are predictive of future growth. This suggests that countries tend to converge to the level of income dictated by the complexity of their productive structures, indicating that development efforts should focus on generating the conditions that would allow complexity to emerge to generate sustained growth and prosperity.

Hidalgo (2009) explores how the productive structure of countries' changes over time by combining techniques of networks science with 42 years of trade data. He finds that, while the Product Space remains relatively stable during this period, the dynamics of countries' productive structures is characterized by a few highly dynamic economies. In particular he identifies Brazil, Indonesia, Turkey, Malaysia, Thailand, Korea, Singapore and China, as countries that transformed their productive structures considerably during these four decades, albeit following different trajectories. He concludes by arguing that the government involvement in the private sector should be to help catalyze market activities and solve coordination problems that emerge naturally when countries try to accumulate capabilities.

If products require certain capabilities to be produced then a country has to make use of new capabilities to diversify its production. The new capabilities are not only related to differences in machinery or worker's skills, but also includes things like infrastructure, marketing strategies, standards and set of regulatory rules that are developed to solve the particular needs of the different activities. If the new capabilities required are not very different from the capabilities already available, the process of diversification is much facilitated. Products are then closely related to some other products but not to all, in terms of how ease is to move from the production of one to another. Based on that idea of product relatedness, a useful framework to analyze possible paths for diversification is to imagine a space occupied by all products, where products that are closely related are placed near to each other in a product space (Hausmann and Klinger, 2007; Hidalgo, Klinger, Barabasi, Hausmann, 2007, ESCAP,2011). An empirical regularity of the product space is that some products are very well connected while some others are connected to only a few products. Products that are well connected provide a platform for further diversification in the future.

Abdon et al (2010) expands Hidalgo and Hausmann (2009) empirical analysis to explore the relationship between product complexity and income. They use the method of reflections to rank the sophistication of 5,107 products and the complexity of the economy of 124 countries, and find that most complex products are machinery, chemicals and metals, while the least complex products are raw materials and commodities, wood, textiles and agricultural products. Their results for the complexity of economies suggest that the most complex are Japan, Germany and Sweden, while the least complex are Cambodia, Papua New Guinea and Nigeria. They also find that major exporters of the more complex products are the high-income countries and the major exporters of the less complex products are the low-income countries. Export shares of the more complex products increase with income, while export shares of the less complex products decrease with income.

3. METHODS AND DATA

This paper constructs a measure of productive capacity that is based on measures of generalized diversification and ubiquity of product-mix obtained through a revised version of the method of reflections proposed by Hidalgo and Hausmann (2009). The modifications applied to the method of reflections are as follows:

- i) All edges of the network that connects countries to products are taken into consideration instead of only those that represent the link between country c to product p where c is a significant exporter of p . Country c , therefore, does not need to be a significant exporter of product p to have its condition of producer of p accounted, being an exporter of p is sufficient (See *Appendix*, section 2).
- ii) The measure of productive capacity constructed takes into consideration the whole set of reflections related to diversification and ubiquity instead of the higher order iteration only and it is calculated as an index that ranks countries based on the difference between their productive capacities to the world's average productive capacity normalized by the standard deviation of the distribution of productive capacities. (See *Appendix*, section 3).

This paper uses disaggregated trade data from *United Nations COMTRADE* using SITC rev2 (5-digit level) covering 240 economies in the period from 1984 to 2009. The data is further disaggregated based on the unit value of exports to account for differences in capabilities inherent to the production of products of different quality (See *Appendix*, section 4). The trade data regarding 2009 has been updated by the *United Nations COMTRADE* and this paper uses data accessed on 27 June 2011. The results presented here related to 2009 are, therefore, an update of the results presented in ESCAP(2011).

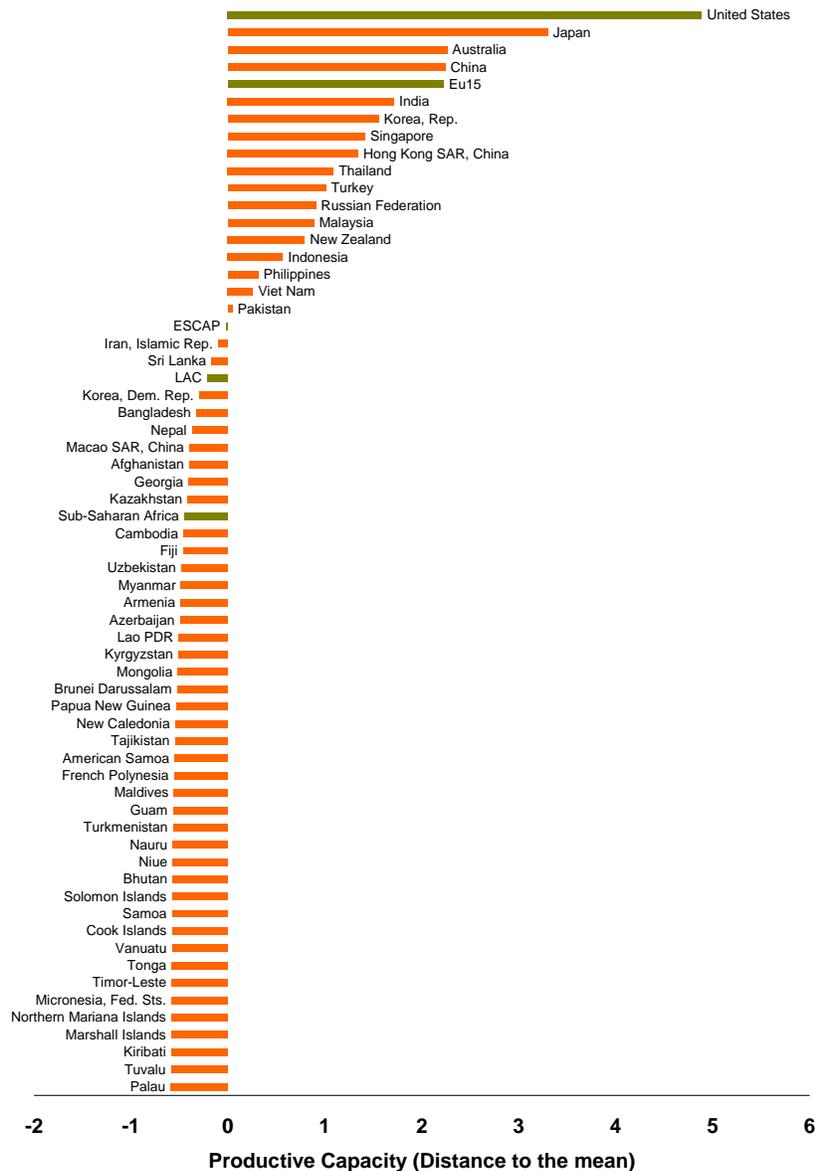
4. RESULTS

Based on the index created, figure 1 presents the ranking of productive capacities for the year 2009 (See *Appendix*, section 5, for productive capacity index of 236 economies from 1984 to 2009). The figure shows the distance between the productive capacity of the country and the

productive capacity of the average country in the world (zero in the horizontal axis) measured by the standard deviation of the distribution of productive capacity.

In this ranking, the United States has the highest productive capacity - in fact, much higher than the average productive capacities of the other countries in the world. If productive capacity were to follow a normal distribution, the probability of finding a country with such high productive capacity would be very small. Moreover, although declining lately, the United States and other developed economies have sustained high levels of productive capacity over many years, which in a way highlight the uniqueness of the levels of productive capacity that developed countries have reached when one considers a long term historical perspective.

Figure 1. Productive capacity – year 2009



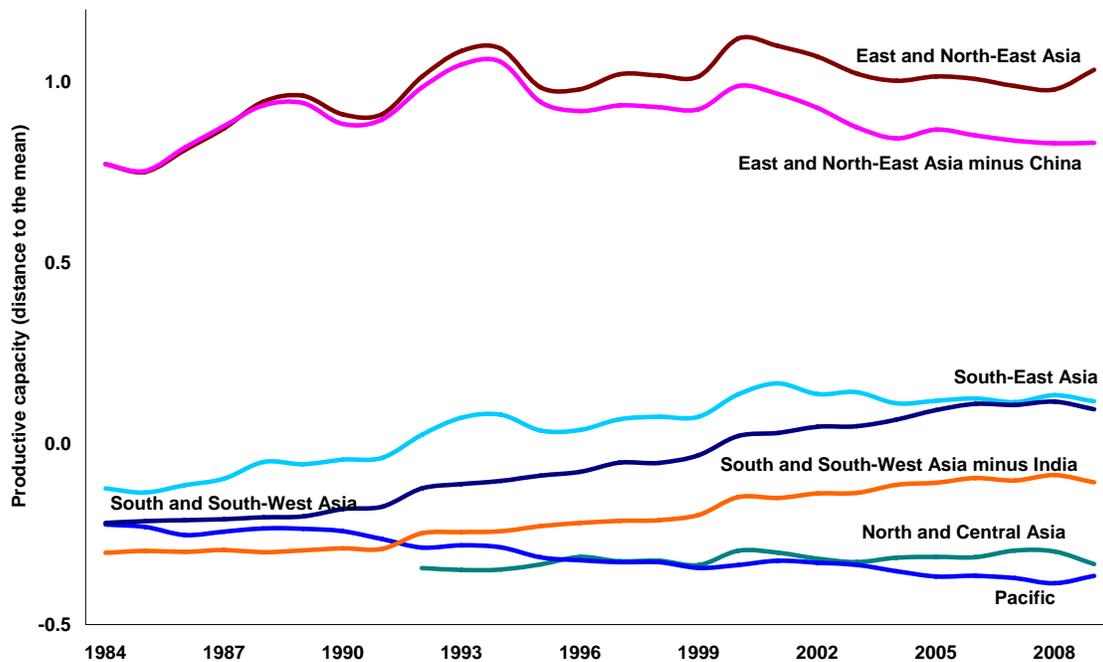
Source: Author based on trade data from the *United Nations Commodity Trade Statistics Database* (COMTRADE).

The Asia-Pacific countries that present above-average productive capacities are the region's developed countries and the emerging developing economies. Japan leads the group well ahead the rest. In the second tier are Australia and China with similar levels of productive capacity, which are slightly higher than the average of the EU-15.³ Other 13 countries form a third tier group of countries with above average productive capacity. It is a diverse group with more 1.7 standard deviation separating the higher (India) and the lower (Pakistan) productive capacities. A notable member of this group is Viet Nam, who used to be below the average until 2001. In fact, the majority of the countries in the Asia-Pacific region have productive capacities that are below the world's average. Not only are most Asia-Pacific countries below average but most of them are at a similar distance from the average – around half a standard deviation away. It is also notable that most Pacific island developing economies are at the bottom of the figure, with the lowest productive capacity amongst the countries of the region. The diversity of the Asia-Pacific region is reflected in its average productive capacity, which is practically the same as the world's average. That puts this region ahead of the other developing regions - the average productive capacities of countries in the Latin America and Caribbean (LAC) and Sub-Saharan Africa are all below the world average.

When considering the transformation over time of the average productive capacity of the Asia-Pacific subregions, some changes are especially notable (figure 2). First, the further increase of the average productive capacity of the East and North-east Asia well ahead of all other subregions, which can be traced to increases in productive capacity in China. Second, the increase in the average productive capacity of South and South-West Asian countries in relation to the world average – from well below the world's average in 1984 to levels similar to the average productive capacity of countries in South-East Asia in 2009. Most of the increase was driven by India. Third, the steady decrease in the average productive capacity of Pacific countries in relation to the world's average. Given that in the same period Australia and New Zealand have experienced an increase in their productive capacity compared to the mean, the Pacific Island developing economies have pushed down the performance of the subregion. The South-East Asia subregion has also experienced an increase in the average productive capacity but at a slower pace and mostly in the period up to early 2000's, while the North and Central Asia has not experienced much change in comparison to the world's average.

³ EU-15: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom.

Figure 2. Average productive capacity in Asia-Pacific subregions over time

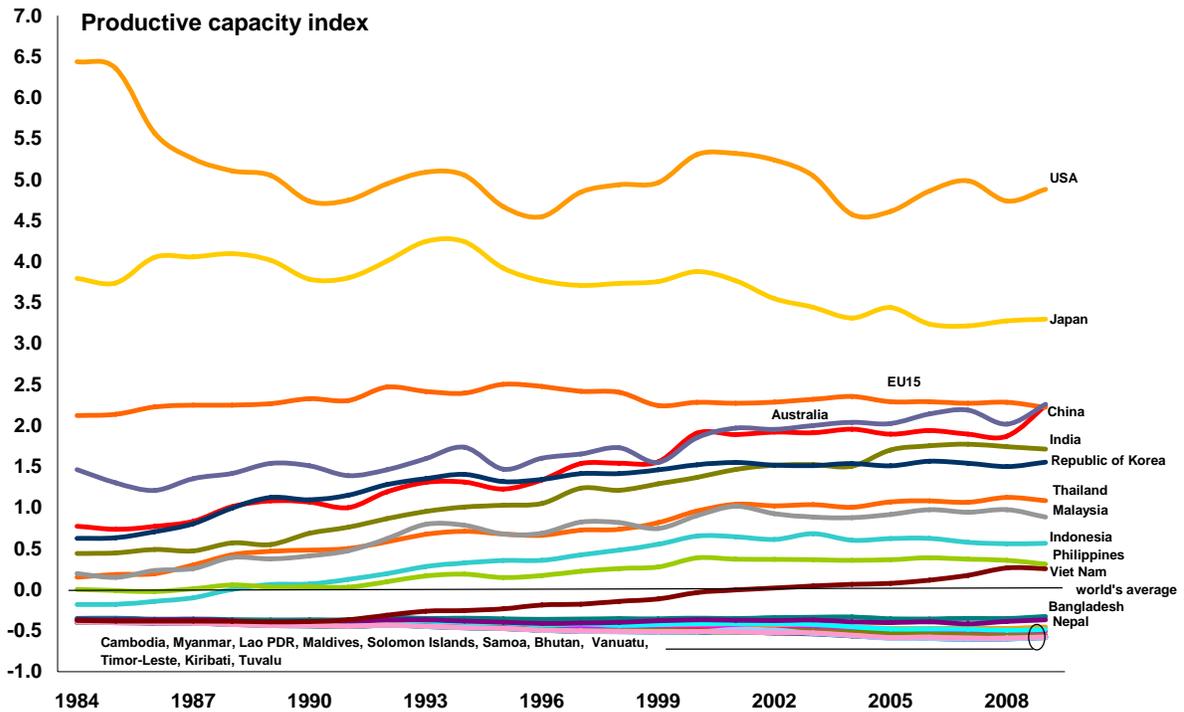


Source: Author based on trade data from the *United Nations Commodity Trade Statistics Database (COMTRADE)*.

Figure 3 presents the evolution over time of the productive capacity of selected countries. The United States has maintained itself some distance away from the world's average productive capacity, but such distance has reduced drastically during the 1980s and has kept moving up and down since then. The lowest points in its performance during this period were in 1990, 1991, 1996, 2004 and 2008. The distance of the average productive capacity of EU-15 countries to the world's mean has remained constant in the past decades. In Asia-Pacific, the average productive capacity of Japan has decreased in the past 15 years, while China and India have increased their productive capacity. China has reached the level of productive capacity of EU-15 and India has taken the lead over the Republic of Korea.

It is worrying to note that the least developed countries have lagged further behind from the world's average during this period stretching over two decades. With the exception of Bangladesh, all other least developed countries in the region have ended the period further away from the world's average in 2009 when compared with their position in 1984. Six least developed countries have experienced a very similar evolution in their productive capacity in relation to the world's average. This may indicate that they possess very similar levels of productive capacity and such levels have not changed significantly during the last two decades. These countries are further away from the world's average, not because they have lost their productive capacity but because they have not changed much in a world where others have increased their productive capacity. This group of six is formed by Bhutan, Samoa, Vanuatu, Solomon Islands, Timor-Leste, Kiribati and Tuvalu. The Lao People's Democratic Republic and Maldives use to be the seventh and eighth members of this group in the first half of the 1990's but since then have improved their productive capacity, although not fast enough to catch up with the world average.

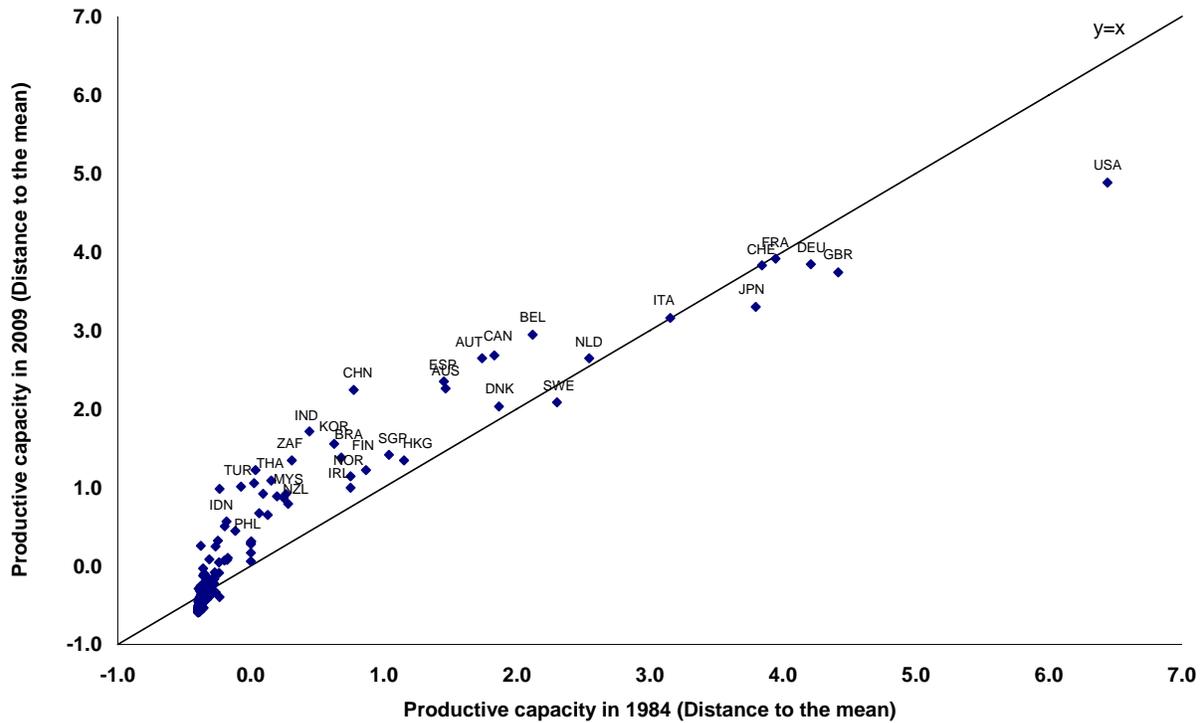
Figure 3. Productive capacity in Asia-Pacific over time, selected countries



Source: Author based on trade data from the *United Nations Commodity Trade Statistics Database (COMTRADE)*.

Valuable lessons can be learnt from the experience of the countries that were able to increase their productive capacity. Figure 4 shows the productive capacity of countries in 1984 (horizontal axis) and in 2009 (vertical axis), measured as the distance from the respective average productive capacity in these two years. The diagonal line indicates levels of productive capacity that are equally distant to the average in 1984 and 2009. Countries that are located below the diagonal line have reduced their productive capacity in relation to the world's average during that period, while countries that are located above the diagonal line have increased their productive capacity.

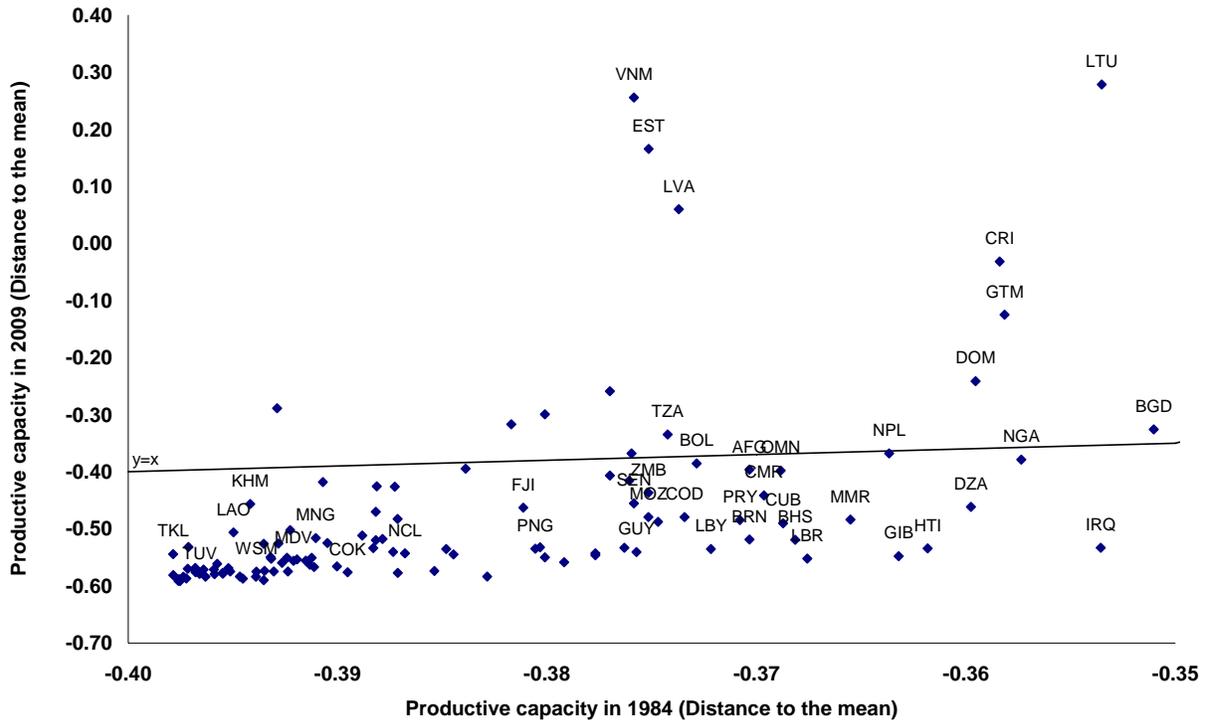
Figure 4. Change in productive capacity (1984-2009)



Source: Author based on trade data from the *United Nations Commodity Trade Statistics Database* (COMTRADE).

As figure 4 indicates, many countries were able to increase their productive capacity in relation to the world's average. The interesting fact is that countries that were much above the average in 1984 have come closer to the average in 2009, while countries that in 1984 were above the average, but closer to it, were able to distance themselves further. This suggests convergence in productive capacity during this period amongst the countries that were above the average. On the other hand, figure 5 shows that the majority of the countries that in 1984 had a productive capacity at a similar level to the least developed countries in Asia-Pacific – roughly more than 0.35 standard deviations below the world's average - have become yet more distant from the world average, which suggests increasing divergence of productive capacities at the global level.

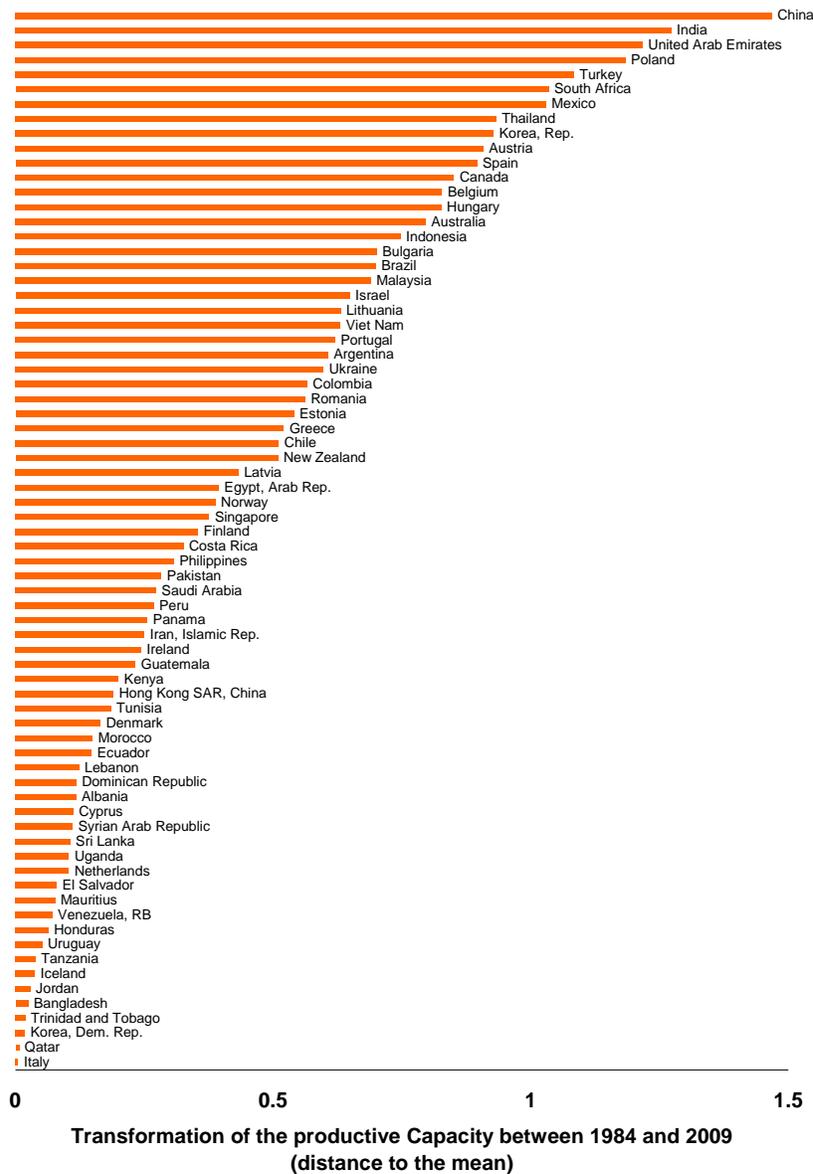
Figure 5. Transformation of countries with productive capacity at similar levels of Asia-Pacific LDCs (1984-2009)



Source: Author based on trade data from the *United Nations Commodity Trade Statistics Database (COMTRADE)*.
 Note: 1992 is the earlier year for Estonia, Latvia and Lithuania.

The countries that have transformed the most in this 25 years period were China, India and the United Arab Emirates (figure 6). From the Asia-Pacific region, Turkey, the Republic of Korea and Thailand are also amongst the top ten countries which increased their productive capacity in relation to the average in the period. Another 12 countries of the region have also experienced positive transformations, but amongst the least developed countries only Bangladesh has increased its productive capacity in relation to the world average and only slightly. Notable is the transformation of productive capacities experienced by Viet Nam, Lithuania, Estonia and Latvia. They all started at levels of productive capacities similar to the least developed countries and were able to raise their productive capacities to above the world’s average.

Figure 6. Countries that have increased their of productive capacity in the past 25 years



Source: Author based on trade data from the *United Nations Commodity Trade Statistics Database* (COMTRADE).

Note: 1992 is the earlier year for Estonia, Latvia, Lithuania and Ukraine.

5. Conclusions

This paper highlighted the stylized fact that countries develop by diversifying towards products that are produced by fewer and more diversified countries, rather than by specializing in doing more of what they already produce. The process of diversification is path dependent - products that a country produces today affect the set of products that a country will be able to produce tomorrow. As a result, diversifying towards some products would increase the range of

possibilities for further diversification. But when let to the forces of the market alone, firms may not diversify through the path that will give the higher return in terms of future diversification.

The analysis of the transformation of productive capacities of countries in Asia-Pacific region showed that China, India and other emerging economies were able to increase their productive capacities during the last 25 years when compared with the world's average. They were able to narrow the gap that separate them to developed countries, in a clear sign of convergence at the top. Countries with below-average productive capacity, however, have dropped further below. This is the situation of most of the countries of the Asia-Pacific region. That highlights the challenges that countries with below-average productive capacity face. It also suggests that the policies that these countries have followed and the international regime that they are inserted were not conducive to the improvement of their productive capacities.

Some suggestions for further studies include: the detailed analysis of the experience of countries that were able to increase their productive capacity in the past 25 years and the identification of macroeconomic and structural changes that are associated with periods of rapid increase, the analysis of how regional integration has contributed to increases in productive capacity, and the analysis of the effect of international production networks in the increase in productive capacities.

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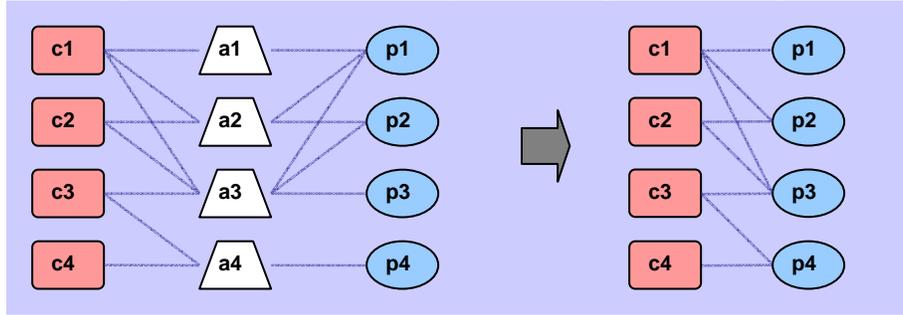
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APPENDIX

1. Method of reflections

The method of reflections assumes that products require specific combinations of capabilities to be produced; countries have some capabilities but not others; and countries will produce goods as long as they have all the required capabilities (Hausmann and Hidalgo, 2010). This is illustrated in the figure A-1, in which the bipartite network that connects countries c and products p is interpreted as the result of the tripartite network, which connects countries c to the productive capacities a that they have, and products p to the capabilities required for their production.

Figure A-1. Tripartite network connecting countries, productive capacities and products



The method of reflections represents such bipartite network connecting countries to products using the adjacent matrix M_{cp} , where:

$$M_{cp} = \begin{cases} 1 & \text{if } RCA_{cp} \geq \text{threshold} \\ 0 & \text{otherwise.} \end{cases} \quad (1)$$

Where the Revealed Comparative Advantage (RCA_{cp}) is defined as the ratio of the share of product p in country c 's exports (x_{cp}) and the share of product p in the global market and the threshold is taken as 1 ($RCA_{cp} \geq 1$) by Hidalgo and Hausmann (2009). Formally:

$$RCA_{cp} = \frac{\left(\frac{x_{cp}}{\sum_k x_{ck}} \right)}{\left(\frac{\sum_j x_{cp}}{\sum_{j,k} x_{jk}} \right)} \quad (2)$$

The method is defined as the recursive set of observables:

$$K_{c,N} = \frac{1}{K_{c,0}} \sum_p M_{cp} K_{p,N-1} \quad (3)$$

$$K_{p,N} = \frac{1}{K_{p,0}} \sum_c M_{cp} K_{c,N-1} \quad (4)$$

For $N \geq 0$, with $K_{c,0}$ representing the number of products exported by country c and $K_{p,0}$ representing the number of countries that export product p . Formally:

$$K_{c,0} = \sum_p M_{cp} \quad (5)$$

$$K_{p,0} = \sum_c M_{cp} \quad (6)$$

The method of reflections thus produces, for each country c , a vector representing the complexity of productive structure of the country in terms of the diversification and ubiquity of its product-mix, which can be identified with an ordered list of N real numbers ($K_{c,0}, K_{c,1}, K_{c,2}, \dots, K_{c,N}$), where N is the number of iterations of the method of reflections. Similarly, the method also produces, for each product p , a vector representing the sophistication of the product in terms of its ubiquity and the diversification of the countries that produce that product, which can be identified with an ordered list of N real numbers ($K_{p,0}, K_{p,1}, K_{p,2}, \dots, K_{p,N}$).

The table A-1 below illustrates how the method of reflections can be used to rank the countries c_1, c_2, c_3 and c_4 , shown in figure A-1, in terms of the capabilities that are available within these countries. The first variable ($K_{c,0}$), which represents the number of products exported by country c , shows that c_1 is the most diversified, and therefore may have more capabilities available to it, while c_4 is the least diversified and thus the country with potentially the lower number of capabilities. This first variable, however, cannot differentiate between c_2 and c_3 given that both are equally diversified - exporting 2 products.

We can turn to the second variable ($K_{c,1}$), representing the average ubiquity of the products exported by country c , to try to rank c_2 and c_3 . Under the assumption mentioned above regarding countries, products and capabilities, a low value of the ubiquity means that few countries are able to produce that product-mix, which in turn implies that a higher number of capabilities are required for its production. Based only on the 2-tuple ($K_{c,0}, K_{c,1}$), however, it is still not possible to differentiate between c_2 and c_3 since the product-mix of each of these countries has the same average ubiquity ($K_{c,1} = 2.5$). We should then move to the next iteration of the method which produces $K_{c,2}$, representing the average diversification of the countries with an export basket similar to country c . The higher value of this variable indicates that the product-mix of country c is associated to countries that are diversified and therefore have more capabilities, from which we infer that country c as well should have more capabilities. Therefore, the results in table 1, combining the interpretation of $K_{c,0}, K_{c,1}$ and $K_{c,2}$, show that, in terms of capabilities available to these countries, the ranking from the highest to the lowest is c_1, c_2, c_3 and c_4 .

As shown in figure A-1, both c_2 and c_3 have in fact 2 capabilities available to each of them: a_2 and a_3 are available in c_2 while a_3 and a_4 are available in c_3 . Therefore, is not only the number of capabilities available to the countries that determine the ranking, but it is also the information regarding the other countries to which those capabilities are also available.

Table A-1. Measures of diversification

	$K_{c,0}$	$K_{c,1}$	$K_{c,2}$
c_1	3	2	3
c_2	2	2.5	3
c_3	2	2.5	2.5
c_4	1	2	1.5

Using a parallel example to make such basic idea behind the application method more clear, suppose that we are tasked to select between two candidates to a job but both are equally qualified based on objective tests. A possible approach is then to try to infer the qualities of the candidates based on people, firms and groups with which they are associated. In this case, education in a first tier university is preferable to the same years of education in a lower rank one; previous employment in a Fortune 500 company is preferable to experience working in a small and medium-sized enterprise, and so on. The final decision is, therefore, the result of the assessment of the individual characteristics of the candidates plus the information that can be inferred from the network of relationships that the candidates take part of. Similarly, the method of reflection is used to generate additional information about the capabilities available to the countries based on the network connecting countries to products.

As the number of iterations of the method increases, however, it becomes difficult to grasp the meaning of the variables produced. For example, the interpretation of $K_{c,3}$ is the average ubiquity of the products exported by the countries with an export basket similar to country c , while $K_{c,4}$ is the average diversification of the countries with an export basket similar to the countries with an export basket similar to country c . Such tongue twisters become larger and larger with higher order of reflections.

As the number N of iterations of the method increases, the higher order variables tend to converge to the same number. There is, therefore, a limit in the number of iterations that result in relevant values to produce the ranking. The value of such limit number (N_L) depends on the structure of the network (i.e. the number of countries, products, and how they are connected). A strategy used by Hidalgo and Hausmann (2009) and by Hidalgo (2009) is to iterate the method enough times that the ranking of the higher variables appears to remain unchanged, which resulted in 18 iterations ($N_L=18$). Hidalgo and Hausmann (2009), therefore, use $K_{c,18}$ as the measure of country's productive capacity and $K_{c,19}$ as the measure of product sophistication.⁴

2. Counting all edges

The main motivation for the inclusion of all edges of the network connecting countries to products in using the method of reflections in this paper is that the basic assumptions of the method do not require exports from country c of product p to have $RCA_{cp} > 0$. In fact, the assumptions are not related to any measure of the volume of exports, but only to the empirical

⁴ Hidalgo (2009) uses the same measures of productive capacity and product sophistication. Adbon et al (2010) uses $K_{c,16}$ as the measure of country's productive capacity and $K_{c,17}$ as the measure of product sophistication.

evidence of producing or not the product. Consider, for example, exports of garments involving Bangladesh and USA, more specifically, the 4-digit product category 8424 “men’s jackets, blazers and the like”. In 2000, Bangladesh’s export value for this category represented 0.16% of its total exports, which was 4 times the share of the global export value of this category in all countries exports (0.04%). On the other hand, US export value for the same category represented 0.0039% of its exports ($RCA_{US\ 8424} = 0.09$). If in applying the method of reflections the threshold for the RCA_{cp} is set to any value higher than 0.09, the fact that USA does produce “men’s jackets, blazers and the like” is not considered, as if the capabilities required to produce this category of product are not available in the country, which clearly is not the case.

In addition, RCA_{cp} is affected by changes in the volume of trade which makes it particularly unreliable to keep track of the productive capacities in commodity-export dependent small economies.

3. New Measure of Productive Capacity

As mentioned above, Hidalgo and Hausmann (2009) use $K_{c,18}$ as the measure of country’s productive capacity. For each country c , a higher order reflection ($K_{c,2N}$ with $N \geq 1$) provides information regarding product-mix ubiquity and diversification of production of other countries in the network connecting countries and products, which is used to infer the productive capacity of country c .

Such measure, however, fails to provide the useful information when it is applied to poorer economies that export a small number of products. In such cases, the export-oriented production, usually as part of foreign direct investment, of few relatively sophisticated products is captured by the higher order reflection as highly sophisticated.

This paper uses estimates the productive capacity of countries based on the assumptions that the such productive capacity is directly proportional to the mentioned assumptions that the higher the diversification the higher the number of capabilities available in the country and the range of capabilities available will be lower the higher the number of countries that export a similar product-mix. Based on these assumptions, this chapter calculates an index of productive capacities that is directly proportional to the generalized measures of the diversification ($K_{c,2N}$ with $N \geq 0$) and inversely proportional to the generalized measures of ubiquity of product-mix ($K_{c,2N+1}$ with $N \geq 0$).

Formally, productive capacity ($PCAP$) is defined as:

$$PCAP = \frac{K_{c0} \times K_{c2} \times K_{c4} \times K_{c6} \times K_{c8} \times K_{c10} \times K_{c12} \times K_{c14} \times K_{c16} \times K_{c18}}{K_{c1} \times K_{c3} \times K_{c5} \times K_{c7} \times K_{c9} \times K_{c11} \times K_{c13} \times K_{c15} \times K_{c17} \times K_{c19}} \quad (7)$$

The productive capacity index used in the ESCAP (2011) represents the productive capacity in comparison to the world’s average (\overline{PCAP}) measured by the standard deviation of the distribution of productive capacities (σ). Formally:

$$index_c = \frac{PCAP_c - \overline{PCAP}}{\sigma} \quad (8)$$

4. Accounting for differences in product quality

This paper uses disaggregated trade data from *United Nations COMTRADE* using SITC rev2 (5-digit level) covering 240 economies in the period from 1984 to 2009. Data before this period do not have information on the quantity of the product traded and cannot be used to estimate the unit value of products. Countries tend to report imports better than exports; hence, import data are used in the analysis. Import data also contain more observations of exports from the least developed countries and other small developing economies, many of which have not reported export data in many of the years covered by the analysis. Only the part of the dataset that includes quantities of imports was used in the analysis, since this information is used to estimate the unit cost of the products traded.

The distribution of the unit value of products classified using the same 5 digit code is fat-tailed – there are outliers that are many standard deviations away from the mean. Taken apart the possibility of errors in the reporting of the trade, the existence of such outliers may be due to either sizeable differences in the quality of similar products that are reflected in their unit values or the existence of totally different products classified under the same 5 digit code. These reasons justify the assumption that similar products at different unit values are different products. To account for possible differences in trade costs, a simple procedure was adopted.

1) The bilateral trade was initially sorted by the unit used to measure the quantity of the trade (e.g. weight in kilograms or volume in cubic meters). The quantity unit code of the product traded was added to the 5-digit classification to create an “artificial” 6-digit classification. The assumption is that if the products under the same 5-digit code are registered using different quantity code units then they may have different characteristics and could be classified as different products.

2) The bilateral trade in the same 6-digit classification was sorted by the unit value of the trade, which was calculated by dividing the value by the quantity traded. The distribution of unit value (x) for the same 6-digit product was then divided into up to nine groups. The first 3 groups are:

- Group 1 if $x < 1^{\text{st}}$ quartile
- Group 2 if 1^{st} quartile $< x < 3^{\text{rd}}$ quartile
- Group 3 if 3^{rd} quartile $< x < 1.5 * 3^{\text{rd}}$ quartile

For $x > 1.5 * 3^{\text{rd}}$ quartile, the distribution of the unit value (y) above this threshold is further divided into 4 quartiles and 3 more groups are created:

- Group 4 if $y < 1^{\text{st}}$ quartile
- Group 5 if 1^{st} quartile $< y < 3^{\text{rd}}$ quartile
- Group 6 if 3^{rd} quartile $< y < 1.5 * 3^{\text{rd}}$ quartile

Again, for $y > 1.5 * 3^{\text{rd}}$ quartile, the distribution of the unit value (z) above this threshold is further divided into 4 quartiles and 3 more groups are created:

- Group 7 if $z < 1^{\text{st}}$ quartile
- Group 8 if 1^{st} quartile $< z < 3^{\text{rd}}$ quartile
- Group 9 if 3^{rd} quartile $< z < 1.5 * 3^{\text{rd}}$ quartile

The focus on the composition of the export basket is a stronger version of the stylized fact that economic development is associated with the diversification of the production base. While a more diversified export basket implies a more diversified production, an economy could diversify production focusing on efficient import substitution without at the same time being able to diversify the export basket. Therefore, the evidence provided in this paper relates to the composition of exports, which is meant to be a proxy for the country's production.

Moreover, a country seldom produces all parts that constitute a product. Many developing countries export - with minor value-added – products that they have just imported. However, the analysis conducted in this Survey is able to differentiate the productive capacities available in a country that imports sophisticated parts and components for assembling a certain product from the productive capacities of a country that produces 1) these parts and components or 2) produces the same final good using them as inputs.

The first case is straightforward. Different products require different productive capacities to be produced. For example, since the final product (e.g. computers) produced by a developing country is different from its sophisticated parts and components (e.g. micro-processor) that were produced by the developed country, the analysis considers that the productive capacities available in the developing country to produce computers are different of the productive capacities available in the developed country to produce micro-processors. The fact that developed countries provide a sizable share of developing countries' total intermediate imports does not “increase” the productive capacity of the latter.

The analysis conducted in this paper is able to differentiate the productive capacities in the second case, when both developed and developing countries produce the same product (e.g. computers), by using a dataset that differentiates products by unit price. The literature on trade and quality has shown that, when exporting the same product to the same country, the higher-income country will systematically export the higher unit price product while the lower-income country will systematically export the lower unit price product. In the analysis we consider computers of different prices as different products. Hence, the productive capacities available in these countries to produce these products are inherently different.

5. Productive capacity index

Country Name	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Afghanistan	-0.37	-0.38	-0.38	-0.38	-0.40	-0.42	-0.42	-0.42	-0.39	-0.41	-0.43	-0.44	-0.45	-0.46	-0.47	-0.48	-0.46	-0.46	-0.48	-0.47	-0.49	-0.50	-0.50	-0.49	-0.47	-0.40
Albania	-0.38	-0.38	-0.38	-0.38	-0.40	-0.41	-0.40	-0.42	-0.40	-0.40	-0.41	-0.41	-0.43	-0.45	-0.45	-0.46	-0.43	-0.42	-0.44	-0.43	-0.44	-0.44	-0.44	-0.42	-0.36	-0.26
Algeria	-0.36	-0.36	-0.36	-0.36	-0.37	-0.38	-0.39	-0.40	-0.38	-0.39	-0.41	-0.42	-0.44	-0.45	-0.45	-0.45	-0.45	-0.44	-0.44	-0.45	-0.46	-0.47	-0.49	-0.49	-0.44	-0.46
American Samoa																	-0.50	-0.51	-0.50	-0.51	-0.54	-0.55	-0.55	-0.55	-0.56	-0.55
Andorra	-0.38	-0.39	-0.39	-0.39	-0.39	-0.40	-0.39	-0.40	-0.39	-0.41	-0.41	-0.43	-0.45	-0.46	-0.46	-0.45	-0.44	-0.42	-0.44	-0.44	-0.44	-0.44	-0.42	-0.44	-0.41	-0.44
Angola	-0.39	-0.40	-0.40	-0.40	-0.42	-0.43	-0.43	-0.44	-0.42	-0.43	-0.45	-0.46	-0.48	-0.49	-0.49	-0.49	-0.49	-0.48	-0.49	-0.50	-0.51	-0.52	-0.52	-0.52	-0.51	-0.50
Anguilla			-0.41	-0.41	-0.42	-0.43	-0.44	-0.44	-0.43	-0.44	-0.45	-0.47	-0.49	-0.50	-0.50	-0.51	-0.51	-0.51	-0.53	-0.53	-0.55	-0.58	-0.58	-0.59	-0.58	-0.57
Antigua and Barbuda	-0.39	-0.39	-0.39	-0.40	-0.40	-0.42	-0.42	-0.43	-0.42	-0.42	-0.43	-0.44	-0.46	-0.47	-0.49	-0.48	-0.46	-0.47	-0.47	-0.48	-0.51	-0.52	-0.51	-0.52	-0.51	-0.43
Argentina	0.06	0.05	0.07	0.06	0.12	0.14	0.12	0.19	0.29	0.29	0.30	0.25	0.26	0.26	0.25	0.28	0.36	0.35	0.31	0.34	0.44	0.59	0.62	0.62	0.65	0.67
Armenia									-0.43	-0.44	-0.46	-0.46	-0.45	-0.44	-0.46	-0.47	-0.46	-0.45	-0.46	-0.46	-0.47	-0.48	-0.42	-0.34	-0.43	-0.49
Aruba					-0.42	-0.43	-0.44	-0.44	-0.41	-0.43	-0.45	-0.46	-0.47	-0.48	-0.48	-0.50	-0.49	-0.50	-0.51	-0.50	-0.52	-0.46	-0.45	-0.46	-0.46	-0.51
Australia	1.46	1.30	1.21	1.36	1.42	1.54	1.51	1.39	1.46	1.60	1.74	1.47	1.60	1.65	1.73	1.55	1.85	1.97	1.96	2.00	2.04	2.02	2.14	2.19	2.02	2.26
Austria	1.74	1.76	1.88	1.88	1.85	1.93	2.00	1.91	2.23	2.20	2.13	2.26	2.26	2.04	2.10	2.07	2.13	2.07	2.24	2.21	2.37	2.31	2.29	2.33	2.43	2.65
Azerbaijan									-0.43	-0.43	-0.45	-0.46	-0.44	-0.44	-0.45	-0.46	-0.42	-0.44	-0.45	-0.46	-0.45	-0.45	-0.46	-0.46	-0.46	-0.49
Bahamas, The	-0.37	-0.38	-0.38	-0.39	-0.40	-0.40	-0.41	-0.42	-0.39	-0.40	-0.41	-0.42	-0.45	-0.45	-0.46	-0.46	-0.45	-0.46	-0.47	-0.47	-0.51	-0.52	-0.52	-0.53	-0.53	-0.52
Bahrain	-0.35	-0.34	-0.36	-0.36	-0.36	-0.38	-0.38	-0.37	-0.33	-0.30	-0.35	-0.35	-0.36	-0.39	-0.36	-0.38	-0.37	-0.36	-0.35	-0.37	-0.34	-0.32	-0.33	-0.33	-0.36	-0.37
Bangladesh	-0.35	-0.35	-0.36	-0.36	-0.36	-0.37	-0.37	-0.37	-0.34	-0.35	-0.35	-0.36	-0.36	-0.36	-0.35	-0.36	-0.35	-0.35	-0.34	-0.34	-0.33	-0.35	-0.36	-0.35	-0.35	-0.33
Barbados	-0.34	-0.34	-0.35	-0.36	-0.37	-0.36	-0.39	-0.40	-0.39	-0.36	-0.39	-0.39	-0.42	-0.43	-0.42	-0.42	-0.36	-0.39	-0.40	-0.41	-0.43	-0.45	-0.45	-0.41	-0.38	-0.37
Belarus									-0.36	-0.35	-0.26	-0.22	-0.23	-0.26	-0.24	-0.27	-0.26	-0.26	-0.28	-0.27	-0.24	-0.26	-0.25	-0.24	-0.22	-0.18
Belgium	2.12	2.16	2.26	2.25	2.22	2.33	2.39	2.39	2.57	2.62	2.61	2.76	2.65	2.58	2.52	2.57	2.53	2.60	2.75	2.69	2.76	2.71	2.69	2.68	2.72	2.95
Belize	-0.39	-0.39	-0.40	-0.40	-0.41	-0.42	-0.42	-0.43	-0.41	-0.42	-0.44	-0.45	-0.46	-0.47	-0.46	-0.49	-0.48	-0.48	-0.49	-0.50	-0.51	-0.53	-0.53	-0.54	-0.48	-0.42
Benin	-0.39	-0.40	-0.40	-0.39	-0.41	-0.41	-0.42	-0.42	-0.43	-0.44	-0.44	-0.44	-0.47	-0.48	-0.48	-0.49	-0.47	-0.48	-0.49	-0.49	-0.52	-0.54	-0.56	-0.56	-0.57	-0.55
Bermuda	-0.38	-0.38	-0.39	-0.40	-0.40	-0.42	-0.42	-0.42	-0.42	-0.43	-0.44	-0.45	-0.47	-0.48	-0.49	-0.50	-0.49	-0.49	-0.50	-0.51	-0.54	-0.56	-0.56	-0.56	-0.57	-0.55
Bhutan	-0.40	-0.40	-0.40	-0.41	-0.42	-0.44	-0.43	-0.44	-0.43	-0.43	-0.46	-0.46	-0.49	-0.50	-0.50	-0.51	-0.50	-0.51	-0.52	-0.52	-0.55	-0.58	-0.58	-0.58	-0.58	-0.57
Bolivia	-0.37	-0.38	-0.38	-0.38	-0.40	-0.40	-0.40	-0.40	-0.37	-0.37	-0.38	-0.40	-0.41	-0.43	-0.43	-0.44	-0.42	-0.42	-0.42	-0.41	-0.43	-0.41	-0.42	-0.44	-0.42	-0.39
Bosnia and Herzegovina									-0.32	-0.39	-0.43	-0.44	-0.38	-0.37	-0.39	-0.36	-0.31	-0.28	-0.28	-0.31	-0.24	-0.24	-0.23	-0.25	-0.22	-0.16
Botswana																	-0.46	-0.47	-0.48	-0.49	-0.45	-0.47	-0.43	-0.44	-0.42	-0.41
Bouvet Island																	-0.52	-0.53	-0.54	-0.54	-0.57	-0.60	-0.60	-0.60	-0.60	-0.59

Country Name	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Brazil	0.68	0.67	0.62	0.53	0.70	0.76	0.60	0.74	0.80	0.79	0.80	0.77	0.71	0.73	0.73	0.73	0.81	0.84	0.88	0.90	0.98	1.16	1.22	1.19	1.24	1.38
British Indian Ocean Territory	-0.40	-0.40	-0.40	-0.41	-0.42	-0.44	-0.44	-0.45	-0.43	-0.45	-0.46	-0.47	-0.49	-0.50	-0.51	-0.51	-0.51	-0.52	-0.53	-0.53	-0.55	-0.59	-0.59	-0.59	-0.60	-0.58
Brunei Darussalam	-0.37	-0.38	-0.38	-0.38	-0.40	-0.41	-0.40	-0.40	-0.39	-0.40	-0.41	-0.42	-0.44	-0.46	-0.46	-0.47	-0.47	-0.48	-0.48	-0.49	-0.51	-0.54	-0.55	-0.55	-0.54	-0.52
Bulgaria	-0.20	-0.21	-0.20	-0.21	-0.20	-0.19	-0.16	-0.19	-0.10	-0.10	-0.04	-0.03	0.02	0.01	0.04	0.04	0.11	0.13	0.17	0.21	0.29	0.32	0.35	0.38	0.39	0.51
Burkina Faso	-0.39	-0.40	-0.40	-0.40	-0.41	-0.42	-0.43	-0.44	-0.43	-0.43	-0.45	-0.46	-0.48	-0.48	-0.48	-0.49	-0.45	-0.44	-0.45	-0.48	-0.50	-0.53	-0.52	-0.53	-0.55	-0.55
Burundi	-0.39	-0.40	-0.40	-0.40	-0.42	-0.44	-0.44	-0.44	-0.43	-0.44	-0.46	-0.46	-0.49	-0.50	-0.51	-0.51	-0.51	-0.51	-0.52	-0.53	-0.56	-0.58	-0.57	-0.59	-0.58	-0.55
Cambodia	-0.39	-0.40	-0.40	-0.40	-0.42	-0.43	-0.43	-0.44	-0.42	-0.42	-0.44	-0.44	-0.45	-0.46	-0.46	-0.45	-0.44	-0.43	-0.44	-0.44	-0.46	-0.47	-0.47	-0.47	-0.47	-0.46
Cameroon	-0.37	-0.37	-0.37	-0.38	-0.40	-0.40	-0.41	-0.42	-0.40	-0.40	-0.40	-0.40	-0.43	-0.44	-0.44	-0.44	-0.43	-0.43	-0.46	-0.44	-0.45	-0.43	-0.46	-0.48	-0.48	-0.44
Canada	1.83	1.76	1.53	1.63	1.76	1.91	1.75	1.85	1.89	1.91	1.96	1.92	2.00	2.13	2.06	2.10	2.30	2.26	2.32	2.30	2.35	2.41	2.57	2.42	2.48	2.68
Cape Verde	-0.40	-0.40	-0.40	-0.41	-0.42	-0.43	-0.44	-0.45	-0.43	-0.44	-0.46	-0.47	-0.49	-0.50	-0.50	-0.51	-0.50	-0.51	-0.52	-0.52	-0.55	-0.57	-0.57	-0.58	-0.58	-0.57
Cayman Islands	-0.39	-0.40	-0.40	-0.40	-0.41	-0.42	-0.44	-0.44	-0.42	-0.44	-0.46	-0.46	-0.48	-0.49	-0.49	-0.50	-0.49	-0.50	-0.51	-0.51	-0.54	-0.56	-0.56	-0.56	-0.57	-0.56
Central African Republic	-0.39	-0.40	-0.40	-0.40	-0.42	-0.43	-0.43	-0.44	-0.43	-0.44	-0.45	-0.46	-0.48	-0.49	-0.50	-0.50	-0.49	-0.50	-0.51	-0.52	-0.54	-0.57	-0.57	-0.57	-0.58	-0.56
Chad	-0.40	-0.40	-0.40	-0.41	-0.42	-0.43	-0.44	-0.44	-0.43	-0.44	-0.46	-0.47	-0.49	-0.50	-0.51	-0.51	-0.51	-0.52	-0.53	-0.53	-0.55	-0.58	-0.57	-0.59	-0.58	-0.56
Chile	-0.26	-0.23	-0.18	-0.19	-0.16	-0.17	-0.10	-0.07	0.01	0.03	0.03	0.03	0.07	0.01	-0.01	0.00	0.05	0.04	0.03	0.05	0.04	0.17	0.15	0.12	0.18	0.25
China	0.77	0.74	0.77	0.83	1.01	1.08	1.07	1.00	1.19	1.31	1.31	1.23	1.34	1.54	1.54	1.56	1.91	1.89	1.92	1.91	1.96	1.90	1.94	1.90	1.87	2.24
Christmas Island	-0.39	-0.40	-0.40	-0.41	-0.42	-0.44	-0.44	-0.45	-0.43	-0.45	-0.46	-0.47	-0.49	-0.50	-0.51	-0.52	-0.52	-0.52	-0.53	-0.53	-0.56	-0.59	-0.59	-0.60	-0.60	-0.58
Cocos (Keeling) Islands	-0.39	-0.40	-0.40	-0.41	-0.42	-0.43	-0.44	-0.44	-0.43	-0.44	-0.46	-0.47	-0.49	-0.50	-0.51	-0.52	-0.52	-0.52	-0.53	-0.54	-0.56	-0.59	-0.59	-0.59	-0.59	-0.58
Colombia	-0.25	-0.24	-0.20	-0.21	-0.20	-0.19	-0.17	-0.10	-0.04	-0.02	0.01	-0.01	-0.04	-0.03	-0.03	-0.03	0.09	0.02	0.06	0.05	0.09	0.20	0.20	0.21	0.20	0.32
Comoros	-0.40	-0.40	-0.40	-0.41	-0.42	-0.43	-0.44	-0.44	-0.43	-0.44	-0.46	-0.47	-0.49	-0.50	-0.51	-0.51	-0.51	-0.52	-0.52	-0.53	-0.56	-0.59	-0.59	-0.59	-0.60	-0.57
Congo, Democratic Republic of (was Zaire)	-0.37	-0.38	-0.38	-0.39	-0.40	-0.41	-0.41	-0.42	-0.41	-0.42	-0.43	-0.43	-0.47	-0.47	-0.48	-0.48	-0.48	-0.49	-0.50	-0.49	-0.51	-0.53	-0.52	-0.52	-0.51	-0.48
Congo, Rep.	-0.39	-0.39	-0.40	-0.40	-0.41	-0.43	-0.43	-0.44	-0.42	-0.43	-0.45	-0.46	-0.48	-0.49	-0.49	-0.49	-0.49	-0.49	-0.50	-0.51	-0.52	-0.53	-0.53	-0.54	-0.55	-0.53
Cook Islands	-0.39	-0.39	-0.40	-0.40	-0.42	-0.43	-0.43	-0.43	-0.43	-0.44	-0.46	-0.47	-0.49	-0.50	-0.50	-0.51	-0.51	-0.52	-0.53	-0.53	-0.55	-0.58	-0.58	-0.59	-0.59	-0.58
Costa Rica	-0.36	-0.36	-0.27	-0.29	-0.29	-0.29	-0.28	-0.25	-0.25	-0.17	-0.20	-0.21	-0.21	-0.19	-0.18	-0.17	-0.13	-0.14	-0.12	-0.15	-0.16	-0.09	-0.06	-0.06	-0.12	-0.03
Cote d'Ivoire	-0.35	-0.35	-0.34	-0.33	-0.36	-0.36	-0.36	-0.38	-0.37	-0.36	-0.36	-0.34	-0.35	-0.36	-0.35	-0.37	-0.34	-0.33	-0.36	-0.39	-0.41	-0.41	-0.44	-0.46	-0.47	-0.44
Croatia									-0.16	-0.12	-0.11	-0.09	-0.07	-0.10	-0.09	-0.08	-0.07	-0.03	0.01	0.08	0.22	0.19	0.21	0.27	0.28	0.23
Cuba	-0.37	-0.38	-0.36	-0.38	-0.38	-0.40	-0.41	-0.41	-0.40	-0.40	-0.41	-0.41	-0.44	-0.44	-0.44	-0.44	-0.43	-0.43	-0.43	-0.44	-0.46	-0.48	-0.48	-0.49	-0.49	-0.49
Cyprus	-0.28	-0.28	-0.30	-0.28	-0.28	-0.28	-0.29	-0.30	-0.24	-0.25	-0.25	-0.24	-0.20	-0.22	-0.23	-0.23	-0.19	-0.21	-0.21	-0.21	-0.17	-0.14	-0.10	-0.14	-0.09	-0.16
Czech Republic										0.37	0.49	0.56	0.65	0.66	0.76	0.79	0.89	0.97	0.97	1.10	1.23	1.27	1.28	1.37	1.41	1.27
Czechoslovakia	0.14	0.11	0.13	0.10	0.17	0.20	0.21	0.27	0.41																	

Country Name	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Denmark	1.87	1.73	1.92	1.94	1.92	1.93	1.93	1.94	2.19	2.03	2.15	2.27	2.26	2.14	2.06	2.07	2.09	2.20	2.16	2.19	2.26	2.26	2.17	2.16	2.17	2.03
Djibouti	-0.39	-0.39	-0.39	-0.40	-0.41	-0.42	-0.42	-0.42	-0.40	-0.42	-0.46	-0.43	-0.49	-0.48	-0.49	-0.49	-0.49	-0.47	-0.49	-0.51	-0.54	-0.54	-0.53	-0.57	-0.58	-0.57
Dominica	-0.39	-0.39	-0.40	-0.40	-0.40	-0.42	-0.40	-0.41	-0.38	-0.38	-0.39	-0.40	-0.43	-0.43	-0.45	-0.44	-0.40	-0.44	-0.48	-0.49	-0.50	-0.51	-0.52	-0.52	-0.53	-0.53
Dominican Republic	-0.36	-0.35	-0.36	-0.36	-0.37	-0.39	-0.39	-0.38	-0.36	-0.36	-0.35	-0.36	-0.37	-0.36	-0.38	-0.34	-0.32	-0.32	-0.29	-0.29	-0.30	-0.26	-0.24	-0.25	-0.25	-0.24
Ecuador	-0.34	-0.35	-0.34	-0.35	-0.35	-0.36	-0.35	-0.35	-0.29	-0.29	-0.29	-0.28	-0.30	-0.28	-0.27	-0.23	-0.23	-0.25	-0.21	-0.24	-0.22	-0.14	-0.18	-0.20	-0.20	-0.19
Egypt, Arab Rep.	-0.31	-0.30	-0.30	-0.30	-0.29	-0.27	-0.24	-0.22	-0.13	-0.13	-0.08	-0.06	-0.08	-0.07	-0.04	-0.04	0.01	-0.02	0.05	0.08	0.14	0.16	0.19	0.19	0.11	0.08
El Salvador	-0.38	-0.38	-0.32	-0.35	-0.35	-0.34	-0.36	-0.35	-0.32	-0.27	-0.29	-0.30	-0.32	-0.29	-0.29	-0.30	-0.25	-0.28	-0.29	-0.29	-0.32	-0.31	-0.27	-0.30	-0.34	-0.30
Equatorial Guinea	-0.40	-0.40	-0.40	-0.41	-0.42	-0.44	-0.44	-0.45	-0.43	-0.45	-0.46	-0.47	-0.49	-0.51	-0.51	-0.52	-0.51	-0.52	-0.53	-0.53	-0.55	-0.58	-0.59	-0.59	-0.59	-0.58
Eritrea										-0.45	-0.46	-0.47	-0.49	-0.50	-0.50	-0.51	-0.51	-0.51	-0.52	-0.53	-0.54	-0.57	-0.57	-0.58	-0.58	-0.57
Estonia									-0.38	-0.35	-0.23	-0.18	-0.13	-0.17	-0.15	-0.14	-0.09	-0.04	-0.04	-0.01	0.11	0.12	0.16	0.16	0.21	0.17
Ethiopia	-0.37	-0.38	-0.39	-0.39	-0.40	-0.42	-0.42	-0.43	-0.42	-0.43	-0.43	-0.44	-0.47	-0.47	-0.48	-0.48	-0.47	-0.48	-0.49	-0.50	-0.50	-0.50	-0.50	-0.52	-0.51	-0.49
Faeroe Islands	-0.38	-0.38	-0.37	-0.37	-0.39	-0.40	-0.41	-0.42	-0.41	-0.43	-0.44	-0.45	-0.47	-0.49	-0.49	-0.49	-0.49	-0.49	-0.48	-0.49	-0.52	-0.55	-0.54	-0.54	-0.54	-0.55
Falkland Islands (Malvinas)	-0.39	-0.40	-0.40	-0.40	-0.42	-0.43	-0.44	-0.45	-0.43	-0.44	-0.46	-0.47	-0.49	-0.50	-0.50	-0.51	-0.52	-0.52	-0.53	-0.54	-0.56	-0.59	-0.60	-0.60	-0.60	-0.59
Fiji	-0.38	-0.38	-0.38	-0.39	-0.38	-0.39	-0.39	-0.40	-0.39	-0.39	-0.41	-0.41	-0.43	-0.43	-0.42	-0.43	-0.42	-0.40	-0.39	-0.41	-0.41	-0.41	-0.42	-0.46	-0.49	-0.46
Finland	0.87	0.87	0.92	0.95	0.94	0.96	0.95	0.96	0.97	0.90	1.01	1.19	1.21	1.18	1.21	1.12	1.14	1.20	1.18	1.22	1.29	1.33	1.30	1.31	1.37	1.22
Former Pacific Islands	-0.40	-0.40	-0.40	-0.41	-0.42	-0.43	-0.44	-0.43																		
Former USSR	0.03	0.02	0.07	0.04	0.14	0.26	0.23	0.21																		
Former Yugoslavia	0.17	0.21	0.22	0.20	0.20	0.24	0.26	0.25																		
France	3.94	4.05	4.37	4.33	4.20	4.26	4.35	4.27	4.37	4.40	4.30	4.54	4.29	4.13	4.14	4.07	4.15	4.14	4.21	4.14	4.17	4.07	3.94	3.83	3.87	3.92
French Guiana	-0.38	-0.39	-0.39	-0.40	-0.41	-0.43	-0.43	-0.44	-0.42	-0.43	-0.45	-0.46														
French Polynesia	-0.39	-0.40	-0.40	-0.40	-0.41	-0.43	-0.43	-0.43	-0.42	-0.43	-0.45	-0.46	-0.48	-0.49	-0.50	-0.50	-0.49	-0.50	-0.51	-0.51	-0.52	-0.54	-0.55	-0.56	-0.57	-0.55
Gabon	-0.39	-0.38	-0.38	-0.39	-0.41	-0.42	-0.43	-0.43	-0.42	-0.43	-0.45	-0.46	-0.48	-0.49	-0.49	-0.49	-0.49	-0.48	-0.49	-0.49	-0.51	-0.53	-0.53	-0.53	-0.52	-0.52
Gambia, The	-0.39	-0.40	-0.40	-0.41	-0.42	-0.43	-0.43	-0.44	-0.42	-0.43	-0.44	-0.45	-0.48	-0.49	-0.49	-0.49	-0.49	-0.50	-0.51	-0.51	-0.53	-0.56	-0.57	-0.58	-0.58	-0.57
Georgia									-0.41	-0.41	-0.43	-0.43	-0.43	-0.43	-0.42	-0.41	-0.37	-0.37	-0.39	-0.39	-0.39	-0.39	-0.39	-0.40	-0.36	-0.41
Germany	4.21	4.19	4.62	4.68	4.42	4.29	4.57	4.53	4.80	4.79	4.56	4.84	4.68	4.39	4.37	4.46	4.35	4.33	4.19	4.28	4.24	4.01	3.99	3.99	3.96	3.84
Ghana	-0.38	-0.39	-0.39	-0.38	-0.39	-0.40	-0.40	-0.41	-0.39	-0.40	-0.40	-0.39	-0.41	-0.40	-0.41	-0.40	-0.38	-0.39	-0.37	-0.36	-0.38	-0.37	-0.40	-0.40	-0.41	-0.39
Gibraltar	-0.36	-0.37	-0.37	-0.37	-0.40	-0.41	-0.40	-0.41	-0.40	-0.41	-0.44	-0.44	-0.47	-0.47	-0.47	-0.49	-0.49	-0.50	-0.50	-0.51	-0.53	-0.55	-0.55	-0.54	-0.54	-0.55
Greece	0.13	0.13	0.14	0.12	0.14	0.21	0.21	0.17	0.27	0.29	0.29	0.32	0.46	0.48	0.48	0.49	0.56	0.57	0.60	0.61	0.73	0.71	0.73	0.70	0.71	0.65
Greenland	-0.38	-0.38	-0.38	-0.39	-0.40	-0.42	-0.42	-0.43	-0.42	-0.43	-0.45	-0.46	-0.48	-0.49	-0.50	-0.50	-0.50	-0.50	-0.50	-0.51	-0.54	-0.56	-0.56	-0.56	-0.57	-0.56
Grenada	-0.39	-0.40	-0.40	-0.40	-0.41	-0.42	-0.42	-0.43	-0.42	-0.43	-0.45	-0.46	-0.48	-0.50	-0.50	-0.50	-0.49	-0.50	-0.50	-0.51	-0.54	-0.57	-0.57	-0.56	-0.57	-0.56

Country Name	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Guadalupe	-0.38	-0.36	-0.37	-0.37	-0.38	-0.39	-0.42	-0.42	-0.41	-0.40	-0.41	-0.43														
Guam																	-0.51	-0.51	-0.52	-0.53	-0.55	-0.57	-0.57	-0.57	-0.57	-0.56
Guatemala	-0.36	-0.36	-0.25	-0.28	-0.29	-0.28	-0.26	-0.26	-0.24	-0.18	-0.15	-0.17	-0.22	-0.21	-0.18	-0.20	-0.13	-0.13	-0.18	-0.19	-0.18	-0.14	-0.11	-0.13	-0.19	-0.13
Guinea	-0.38	-0.39	-0.40	-0.40	-0.41	-0.43	-0.43	-0.44	-0.42	-0.43	-0.45	-0.45	-0.48	-0.49	-0.49	-0.50	-0.48	-0.49	-0.49	-0.50	-0.52	-0.53	-0.54	-0.55	-0.54	-0.54
Guinea-Bissau	-0.40	-0.40	-0.40	-0.41	-0.42	-0.44	-0.44	-0.44	-0.43	-0.44	-0.46	-0.47	-0.49	-0.51	-0.51	-0.52	-0.52	-0.52	-0.53	-0.53	-0.56	-0.59	-0.59	-0.60	-0.60	-0.58
Guyana	-0.38	-0.39	-0.39	-0.40	-0.41	-0.42	-0.42	-0.42	-0.41	-0.42	-0.43	-0.45	-0.47	-0.48	-0.48	-0.48	-0.46	-0.48	-0.49	-0.49	-0.52	-0.53	-0.52	-0.53	-0.54	-0.54
Haiti	-0.36	-0.36	-0.36	-0.38	-0.39	-0.41	-0.42	-0.41	-0.41	-0.42	-0.44	-0.45	-0.47	-0.48	-0.48	-0.49	-0.48	-0.49	-0.50	-0.50	-0.52	-0.52	-0.54	-0.54	-0.55	-0.53
Heard and Mc Donald Islands																	-0.52	-0.52	-0.54	-0.54	-0.57	-0.60	-0.60	-0.60	-0.60	-0.59
Honduras	-0.38	-0.38	-0.36	-0.37	-0.37	-0.39	-0.39	-0.38	-0.35	-0.33	-0.31	-0.32	-0.34	-0.33	-0.33	-0.34	-0.31	-0.34	-0.33	-0.34	-0.35	-0.34	-0.33	-0.33	-0.33	-0.32
Hong Kong SAR, China	1.15	1.11	1.11	1.31	1.42	1.43	1.37	1.37	1.44	1.52	1.55	1.37	1.38	1.48	1.44	1.36	1.47	1.45	1.52	1.36	1.30	1.33	1.38	1.37	1.32	1.34
Hungary	0.09	0.08	0.10	0.09	0.10	0.19	0.21	0.24	0.30	0.33	0.38	0.44	0.48	0.52	0.55	0.55	0.64	0.70	0.75	0.75	0.87	0.83	0.88	0.96	1.02	0.92
Iceland	-0.29	-0.28	-0.25	-0.26	-0.28	-0.29	-0.29	-0.30	-0.28	-0.30	-0.29	-0.29	-0.29	-0.28	-0.27	-0.28	-0.25	-0.24	-0.22	-0.23	-0.20	-0.22	-0.20	-0.20	-0.22	-0.26
India	0.44	0.45	0.49	0.47	0.57	0.55	0.69	0.76	0.87	0.95	1.01	1.03	1.05	1.24	1.21	1.29	1.37	1.47	1.52	1.53	1.51	1.70	1.75	1.77	1.74	1.71
Indonesia	-0.18	-0.18	-0.14	-0.10	0.00	0.06	0.07	0.13	0.19	0.28	0.33	0.36	0.36	0.42	0.48	0.55	0.65	0.65	0.61	0.68	0.60	0.62	0.63	0.58	0.56	0.57
Iran, Islamic Rep.	-0.35	-0.33	-0.33	-0.34	-0.35	-0.34	-0.33	-0.33	-0.28	-0.24	-0.24	-0.23	-0.22	-0.22	-0.24	-0.21	-0.09	-0.10	-0.06	-0.09	-0.04	-0.01	0.02	-0.02	-0.02	-0.10
Iraq	-0.35	-0.37	-0.37	-0.37	-0.38	-0.39	-0.39	-0.44	-0.42	-0.44	-0.45	-0.46	-0.48	-0.50	-0.50	-0.50	-0.50	-0.50	-0.52	-0.51	-0.53	-0.55	-0.55	-0.56	-0.56	-0.53
Ireland	0.75	0.74	0.78	0.79	0.80	0.85	0.85	0.87	0.93	0.92	0.98	0.97	1.04	1.04	1.04	1.01	1.10	1.04	0.97	1.04	1.15	1.17	1.15	1.17	1.13	1.00
Israel	0.26	0.30	0.29	0.30	0.34	0.39	0.38	0.41	0.49	0.56	0.68	0.72	0.76	0.74	0.76	0.79	0.83	0.83	0.84	0.84	0.90	1.03	1.02	1.07	1.10	0.91
Italy	3.15	3.12	3.15	3.18	3.37	3.33	3.53	3.50	3.70	3.51	3.45	3.38	3.53	3.48	3.43	3.60	3.49	3.45	3.42	3.49	3.34	3.21	3.33	3.25	3.17	3.16
Jamaica	-0.33	-0.33	-0.35	-0.35	-0.35	-0.35	-0.37	-0.36	-0.34	-0.35	-0.36	-0.36	-0.36	-0.38	-0.39	-0.39	-0.37	-0.38	-0.37	-0.40	-0.41	-0.40	-0.40	-0.42	-0.43	-0.42
Japan	3.80	3.74	4.05	4.06	4.10	4.02	3.79	3.80	4.01	4.24	4.24	3.92	3.77	3.71	3.73	3.76	3.88	3.77	3.55	3.44	3.31	3.44	3.24	3.22	3.28	3.30
Jordan	-0.35	-0.32	-0.35	-0.35	-0.36	-0.35	-0.36	-0.38	-0.32	-0.33	-0.33	-0.32	-0.34	-0.35	-0.32	-0.32	-0.27	-0.28	-0.25	-0.27	-0.23	-0.21	-0.18	-0.19	-0.26	-0.32
Kazakhstan									-0.41	-0.40	-0.41	-0.40	-0.33	-0.37	-0.39	-0.40	-0.36	-0.38	-0.39	-0.41	-0.40	-0.40	-0.41	-0.39	-0.38	-0.41
Kenya	-0.33	-0.32	-0.31	-0.34	-0.34	-0.35	-0.33	-0.34	-0.32	-0.29	-0.17	-0.12	-0.11	-0.10	-0.07	-0.12	-0.12	-0.13	-0.11	-0.11	-0.12	-0.04	-0.07	-0.04	-0.04	-0.13
Kiribati	-0.40	-0.40	-0.41	-0.41	-0.42	-0.44	-0.44	-0.45	-0.43	-0.45	-0.46	-0.47	-0.50	-0.51	-0.51	-0.52	-0.52	-0.50	-0.53	-0.54	-0.56	-0.59	-0.59	-0.60	-0.60	-0.58
Korea, Dem. Rep.	-0.32	-0.31	-0.30	-0.28	-0.26	-0.27	-0.29	-0.26	-0.22	-0.20	-0.19	-0.21	-0.22	-0.20	-0.22	-0.22	-0.15	-0.17	-0.19	-0.25	-0.25	-0.20	-0.20	-0.24	-0.24	-0.30
Korea, Rep.	0.63	0.63	0.71	0.80	0.99	1.12	1.09	1.15	1.28	1.35	1.40	1.32	1.35	1.41	1.42	1.46	1.52	1.55	1.52	1.51	1.54	1.51	1.57	1.54	1.50	1.56
Kuwait	-0.30	-0.29	-0.31	-0.33	-0.35	-0.35	-0.36	-0.42	-0.36	-0.35	-0.36	-0.37	-0.38	-0.40	-0.38	-0.37	-0.36	-0.36	-0.35	-0.36	-0.35	-0.30	-0.31	-0.32	-0.35	-0.38
Kyrgyzstan									-0.43	-0.42	-0.44	-0.44	-0.44	-0.45	-0.45	-0.46	-0.44	-0.46	-0.46	-0.47	-0.48	-0.51	-0.50	-0.51	-0.52	-0.51
Lao PDR	-0.39	-0.40	-0.40	-0.40	-0.42	-0.43	-0.43	-0.44	-0.42	-0.43	-0.44	-0.45	-0.44	-0.46	-0.48	-0.49	-0.48	-0.48	-0.49	-0.48	-0.50	-0.52	-0.52	-0.52	-0.52	-0.51

Country Name	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Latvia									-0.37	-0.36	-0.32	-0.22	-0.16	-0.19	-0.13	-0.13	-0.14	-0.12	-0.10	-0.08	0.00	0.05	0.07	0.08	0.12	0.06
Lebanon	-0.29	-0.28	-0.29	-0.28	-0.29	-0.31	-0.33	-0.29	-0.23	-0.25	-0.27	-0.26	-0.27	-0.29	-0.26	-0.27	-0.21	-0.21	-0.15	-0.15	-0.11	-0.06	0.00	0.00	-0.03	-0.16
Lesotho																	-0.49	-0.51	-0.52	-0.53	-0.56	-0.58	-0.59	-0.59	-0.59	-0.58
Liberia	-0.37	-0.39	-0.39	-0.40	-0.40	-0.42	-0.42	-0.44	-0.42	-0.44	-0.45	-0.46	-0.48	-0.49	-0.50	-0.50	-0.49	-0.50	-0.51	-0.52	-0.55	-0.56	-0.55	-0.57	-0.57	-0.55
Libya	-0.37	-0.38	-0.39	-0.39	-0.41	-0.41	-0.41	-0.41	-0.39	-0.41	-0.43	-0.44	-0.46	-0.48	-0.48	-0.49	-0.49	-0.49	-0.50	-0.50	-0.52	-0.54	-0.53	-0.54	-0.46	-0.54
Lithuania									-0.35	-0.32	-0.26	-0.21	-0.16	-0.14	-0.08	-0.05	-0.02	-0.01	0.04	0.10	0.17	0.20	0.22	0.28	0.30	0.28
Luxembourg																0.05	0.16	0.19	0.20	0.25	0.35	0.33	0.32	0.31	0.30	0.25
Macao SAR, China	-0.23	-0.25	-0.26	-0.23	-0.23	-0.24	-0.25	-0.27	-0.19	-0.22	-0.24	-0.27	-0.29	-0.32	-0.31	-0.33	-0.32	-0.32	-0.33	-0.34	-0.35	-0.36	-0.37	-0.36	-0.36	-0.40
Macedonia, FYR										-0.30	-0.34	-0.35	-0.27	-0.30	-0.31	-0.31	-0.30	-0.31	-0.33	-0.34	-0.29	-0.29	-0.30	-0.27	-0.26	-0.28
Madagascar	-0.38	-0.38	-0.38	-0.38	-0.40	-0.40	-0.35	-0.41	-0.39	-0.39	-0.40	-0.40	-0.42	-0.42	-0.42	-0.42	-0.39	-0.40	-0.41	-0.42	-0.41	-0.41	-0.40	-0.41	-0.41	-0.41
Malawi	-0.38	-0.39	-0.39	-0.40	-0.42	-0.43	-0.43	-0.43	-0.41	-0.42	-0.43	-0.43	-0.46	-0.47	-0.48	-0.48	-0.48	-0.49	-0.50	-0.50	-0.51	-0.54	-0.54	-0.54	-0.54	-0.53
Malaysia	0.20	0.15	0.23	0.26	0.39	0.38	0.41	0.47	0.62	0.80	0.78	0.68	0.69	0.82	0.82	0.75	0.90	1.02	0.93	0.89	0.88	0.92	0.98	0.94	0.98	0.89
Maldives	-0.39	-0.40	-0.40	-0.40	-0.41	-0.43	-0.43	-0.43	-0.42	-0.44	-0.45	-0.46	-0.49	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.50	-0.52	-0.52	-0.54	-0.55	-0.55	-0.56
Mali	-0.39	-0.39	-0.39	-0.40	-0.41	-0.42	-0.43	-0.43	-0.41	-0.42	-0.44	-0.44	-0.46	-0.46	-0.47	-0.47	-0.45	-0.45	-0.46	-0.47	-0.50	-0.51	-0.51	-0.52	-0.53	-0.52
Malta	-0.26	-0.28	-0.29	-0.28	-0.29	-0.30	-0.31	-0.31	-0.30	-0.29	-0.32	-0.32	-0.31	-0.31	-0.31	-0.32	-0.33	-0.32	-0.32	-0.32	-0.28	-0.31	-0.32	-0.31	-0.33	-0.33
Marshall Islands									-0.44	-0.45	-0.46	-0.47	-0.50	-0.51	-0.51	-0.51	-0.51	-0.52	-0.53	-0.53	-0.56	-0.58	-0.59	-0.59	-0.60	-0.58
Martinique	-0.37	-0.37	-0.38	-0.37	-0.39	-0.40	-0.41	-0.41	-0.40	-0.40	-0.43	-0.44														
Mauritania	-0.39	-0.40	-0.40	-0.40	-0.42	-0.43	-0.43	-0.44	-0.42	-0.44	-0.45	-0.46	-0.48	-0.49	-0.49	-0.50	-0.49	-0.50	-0.50	-0.51	-0.53	-0.56	-0.56	-0.56	-0.56	-0.55
Mauritius	-0.34	-0.32	-0.32	-0.31	-0.33	-0.34	-0.33	-0.34	-0.31	-0.32	-0.32	-0.31	-0.32	-0.31	-0.31	-0.31	-0.24	-0.27	-0.27	-0.22	-0.21	-0.20	-0.23	-0.20	-0.21	-0.26
Mayotte																	-0.52	-0.52	-0.53	-0.53	-0.56	-0.59	-0.60	-0.60	-0.60	-0.58
Mexico	0.02	0.01	0.15	0.12	0.22	0.31	0.26	0.31	0.41	0.48	0.53	0.51	0.58	0.66	0.68	0.74	0.89	0.92	0.88	0.82	0.88	0.99	1.06	1.04	1.06	1.05
Micronesia, Fed. Sts.									-0.44	-0.45	-0.46	-0.47	-0.50	-0.51	-0.51	-0.52	-0.52	-0.52	-0.53	-0.53	-0.56	-0.59	-0.60	-0.60	-0.60	-0.58
Miontserrat	-0.38	-0.39	-0.39	-0.41	-0.42	-0.44	-0.44	-0.44	-0.43	-0.44	-0.46	-0.47	-0.49	-0.50	-0.51	-0.51	-0.51	-0.52	-0.53	-0.53	-0.56	-0.59	-0.59	-0.59	-0.60	-0.58
Moldova									-0.40	-0.40	-0.41	-0.41	-0.39	-0.41	-0.41	-0.42	-0.40	-0.40	-0.41	-0.41	-0.41	-0.43	-0.42	-0.39	-0.37	-0.38
Mongolia	-0.39	-0.40	-0.40	-0.40	-0.41	-0.42	-0.42	-0.43	-0.41	-0.42	-0.44	-0.45	-0.47	-0.48	-0.48	-0.48	-0.48	-0.47	-0.49	-0.48	-0.49	-0.51	-0.51	-0.51	-0.51	-0.52
Montenegro																							-0.52	-0.50	-0.50	-0.48
Morocco	-0.24	-0.23	-0.23	-0.23	-0.23	-0.21	-0.21	-0.22	-0.16	-0.17	-0.16	-0.17	-0.18	-0.18	-0.15	-0.15	-0.13	-0.12	-0.10	-0.08	-0.04	-0.02	-0.02	-0.02	-0.06	-0.09
Mozambique	-0.38	-0.38	-0.38	-0.38	-0.40	-0.40	-0.41	-0.41	-0.40	-0.42	-0.43	-0.45	-0.47	-0.47	-0.47	-0.46	-0.45	-0.47	-0.50	-0.48	-0.49	-0.51	-0.50	-0.50	-0.49	-0.48
Myanmar	-0.37	-0.38	-0.37	-0.37	-0.38	-0.40	-0.40	-0.40	-0.39	-0.40	-0.41	-0.41	-0.43	-0.42	-0.44	-0.43	-0.42	-0.41	-0.41	-0.42	-0.45	-0.48	-0.48	-0.48	-0.49	-0.48
Namibia																	-0.46	-0.46	-0.44	-0.46	-0.48	-0.48	-0.47	-0.46	-0.46	-0.46
Nauru	-0.40	-0.40	-0.40	-0.41	-0.42	-0.44	-0.43	-0.44	-0.43	-0.44	-0.46	-0.46	-0.49	-0.50	-0.50	-0.51	-0.51	-0.51	-0.52	-0.52	-0.55	-0.59	-0.58	-0.58	-0.58	-0.57

Country Name	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	
Nepal	-0.36	-0.37	-0.37	-0.37	-0.38	-0.40	-0.39	-0.40	-0.37	-0.37	-0.38	-0.40	-0.41	-0.41	-0.40	-0.38	-0.37	-0.37	-0.38	-0.37	-0.39	-0.40	-0.39	-0.42	-0.39	-0.37	
Netherlands	2.54	2.56	2.67	2.71	2.79	2.81	2.82	2.69	2.97	3.04	2.94	3.10	2.93	3.00	2.79	2.81	2.83	2.78	2.82	2.83	2.82	2.81	2.92	2.82	2.91	2.65	
Netherlands Antilles	-0.34	-0.33	-0.34	-0.34	-0.34	-0.36	-0.38	-0.38	-0.35	-0.33	-0.34	-0.34	-0.38	-0.35	-0.36	-0.32	-0.24	-0.30	-0.31	-0.31	-0.32	-0.32	-0.26	-0.25	-0.33	-0.35	
New Caledonia	-0.39	-0.39	-0.39	-0.40	-0.41	-0.43	-0.43	-0.43	-0.42	-0.43	-0.45	-0.46	-0.48	-0.49	-0.50	-0.50	-0.46	-0.47	-0.47	-0.49	-0.50	-0.52	-0.46	-0.50	-0.54	-0.54	
New Zealand	0.28	0.23	0.18	0.23	0.45	0.49	0.44	0.32	0.35	0.52	0.54	0.45	0.53	0.54	0.56	0.51	0.64	0.80	0.83	0.82	0.84	1.01	0.91	0.91	0.87	0.79	
Nicaragua	-0.39	-0.39	-0.38	-0.38	-0.40	-0.40	-0.40	-0.41	-0.39	-0.39	-0.41	-0.41	-0.43	-0.44	-0.43	-0.44	-0.41	-0.41	-0.42	-0.42	-0.44	-0.44	-0.42	-0.43	-0.44	-0.43	
Niger	-0.39	-0.38	-0.38	-0.39	-0.40	-0.42	-0.42	-0.43	-0.42	-0.43	-0.44	-0.44	-0.47	-0.48	-0.48	-0.48	-0.47	-0.47	-0.48	-0.48	-0.50	-0.53	-0.52	-0.53	-0.53	-0.52	
Nigeria	-0.36	-0.37	-0.36	-0.35	-0.37	-0.34	-0.35	-0.37	-0.36	-0.36	-0.36	-0.32	-0.35	-0.36	-0.38	-0.36	-0.30	-0.29	-0.25	-0.28	-0.29	-0.28	-0.29	-0.33	-0.33	-0.38	
Niue	-0.40	-0.40	-0.41	-0.41	-0.42	-0.44	-0.44	-0.45	-0.44	-0.45	-0.46	-0.47	-0.50	-0.51	-0.51	-0.52	-0.51	-0.52	-0.53	-0.54	-0.56	-0.60	-0.59	-0.60	-0.59	-0.57	
Norfolk Island	-0.40		-0.41	-0.41	-0.43	-0.44	-0.44	-0.45	-0.44	-0.45	-0.47	-0.48	-0.50	-0.51	-0.51	-0.52	-0.52	-0.52	-0.53	-0.54	-0.56	-0.60	-0.60	-0.60	-0.60	-0.59	
Northern Mariana Islands									-0.44	-0.45	-0.46	-0.47	-0.49	-0.50	-0.50	-0.51	-0.51	-0.51	-0.52	-0.52	-0.54	-0.58	-0.58	-0.59	-0.59	-0.58	
Norway	0.75	0.75	0.80	0.87	0.88	0.87	0.81	0.89	0.90	0.89	0.91	1.04	1.06	1.01	0.92	0.96	0.90	0.97	1.07	1.07	1.10	1.21	1.20	1.20	1.20	1.14	
Oman	-0.37	-0.37	-0.38	-0.37	-0.39	-0.41	-0.40	-0.42	-0.40	-0.39	-0.40	-0.39	-0.40	-0.42	-0.40	-0.41	-0.38	-0.39	-0.38	-0.39	-0.39	-0.34	-0.36	-0.36	-0.37	-0.40	
Pakistan	-0.24	-0.22	-0.22	-0.21	-0.21	-0.20	-0.17	-0.17	-0.11	-0.07	-0.10	-0.12	-0.12	-0.14	-0.11	-0.11	-0.07	-0.05	0.00	0.00	0.00	0.05	0.08	0.05	0.06	0.04	
Palau									-0.43	-0.45	-0.46	-0.47	-0.49	-0.50	-0.51	-0.52	-0.52	-0.52	-0.54	-0.54	-0.57	-0.60	-0.60	-0.60	-0.60	-0.59	
Palestinian territory, Occupied																											
Panama	-0.18	-0.16	-0.11	-0.17	-0.10	-0.11	-0.18	-0.18	-0.09	-0.06	-0.10	-0.12	-0.17	-0.13	-0.14	-0.11	-0.01	-0.07	-0.03	-0.06	-0.02	0.00	0.05	0.06	0.03	0.08	
Papua New Guinea	-0.38	-0.39	-0.39	-0.39	-0.39	-0.39	-0.40	-0.41	-0.40	-0.41	-0.43	-0.43	-0.46	-0.47	-0.48	-0.48	-0.48	-0.49	-0.49	-0.50	-0.52	-0.54	-0.54	-0.54	-0.55	-0.53	
Paraguay	-0.37	-0.38	-0.38	-0.39	-0.40	-0.41	-0.41	-0.41	-0.38	-0.39	-0.41	-0.41	-0.44	-0.45	-0.46	-0.46	-0.45	-0.45	-0.46	-0.46	-0.48	-0.49	-0.49	-0.49	-0.50	-0.48	
Peru	-0.20	-0.21	-0.21	-0.25	-0.25	-0.25	-0.24	-0.23	-0.21	-0.20	-0.19	-0.21	-0.22	-0.20	-0.20	-0.18	-0.11	-0.13	-0.10	-0.11	-0.07	0.04	0.05	0.07	0.04	0.07	
Philippines	0.00	-0.01	-0.02	0.01	0.06	0.03	0.03	0.03	0.10	0.17	0.19	0.15	0.17	0.22	0.26	0.28	0.39	0.37	0.37	0.36	0.36	0.36	0.39	0.37	0.36	0.31	
Pitcairn	-0.40	-0.40	-0.41	-0.41	-0.42	-0.44	-0.44	-0.45	-0.44	-0.45	-0.46	-0.48	-0.50	-0.51	-0.51	-0.52	-0.52	-0.52	-0.53	-0.54	-0.56	-0.59	-0.59	-0.60	-0.59	-0.58	
Poland	0.04	0.01	0.01	0.05	0.06	0.14	0.16	0.22	0.27	0.28	0.36	0.47	0.53	0.53	0.60	0.62	0.69	0.74	0.84	0.92	1.02	1.06	1.12	1.22	1.28	1.22	
Portugal	0.25	0.34	0.26	0.27	0.29	0.38	0.39	0.38	0.43	0.56	0.50	0.59	0.58	0.57	0.60	0.61	0.69	0.67	0.71	0.81	0.87	0.84	0.87	0.89	0.94	0.87	
Qatar	-0.38	-0.38	-0.38	-0.39	-0.40	-0.41	-0.42	-0.42	-0.40	-0.41	-0.42	-0.41	-0.44	-0.45	-0.44	-0.45	-0.44	-0.44	-0.43	-0.42	-0.41	-0.39	-0.37	-0.36	-0.37	-0.37	
REUNION	-0.38	-0.39	-0.39	-0.40	-0.41	-0.42	-0.42	-0.43	-0.42	-0.42	-0.43	-0.44															
ROMANIA	-0.12	-0.16	-0.16	-0.17	-0.18	-0.17	-0.20	-0.20	-0.12	-0.13	-0.07	-0.03	-0.02	-0.03	0.03	0.01	0.06	0.13	0.18	0.20	0.31	0.37	0.39	0.47	0.49	0.45	
Russian Federation									0.30	0.28	0.41	0.52	0.63	0.60	0.65	0.62	0.77	0.77	0.71	0.71	0.88	0.98	0.96	1.05	1.06	0.91	
Rwanda	-0.39	-0.40	-0.40	-0.40	-0.42	-0.43	-0.43	-0.44	-0.43	-0.44	-0.46	-0.47	-0.48	-0.49	-0.50	-0.51	-0.51	-0.52	-0.52	-0.53	-0.55	-0.56	-0.57	-0.57	-0.57	-0.57	
Saint Helena	-0.39	-0.40	-0.40	-0.41	-0.42	-0.44	-0.44	-0.45	-0.43	-0.45	-0.46	-0.47	-0.49	-0.49	-0.50	-0.51	-0.50	-0.51	-0.51	-0.52	-0.54	-0.58	-0.58	-0.59	-0.59	-0.57	

Country Name	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	
Saint Pierre and Miquelon	-0.39	-0.40	-0.40	-0.41	-0.42	-0.43	-0.43	-0.44	-0.43	-0.44	-0.46	-0.47	-0.49	-0.50	-0.50	-0.52	-0.52	-0.51	-0.52	-0.54	-0.54	-0.57	-0.60	-0.60	-0.60	-0.60	-0.59
Samoa	-0.39	-0.40	-0.40	-0.41	-0.42	-0.44	-0.44	-0.45	-0.43	-0.44	-0.46	-0.47	-0.49	-0.50	-0.51	-0.51	-0.50	-0.51	-0.52	-0.53	-0.55	-0.58	-0.58	-0.58	-0.59	-0.57	
San Marino																	-0.50	-0.51	-0.52	-0.52	-0.54	-0.57	-0.57	-0.48	-0.47	-0.49	
Sao Tome and Principe	-0.40	-0.40	-0.40	-0.41	-0.42	-0.44	-0.44	-0.45	-0.43	-0.44	-0.45	-0.47	-0.49	-0.50	-0.50	-0.51	-0.51	-0.52	-0.52	-0.53	-0.55	-0.58	-0.58	-0.59	-0.59	-0.57	
Saudi Arabia	-0.17	-0.17	-0.16	-0.15	-0.17	-0.14	-0.11	-0.17	-0.17	-0.13	-0.11	-0.01	-0.07	0.03	0.04	0.00	0.15	0.07	0.17	0.18	0.21	0.27	0.29	0.23	0.17	0.10	
Senegal	-0.38	-0.38	-0.38	-0.38	-0.40	-0.40	-0.41	-0.42	-0.40	-0.41	-0.43	-0.41	-0.41	-0.42	-0.42	-0.43	-0.42	-0.39	-0.41	-0.40	-0.38	-0.38	-0.40	-0.38	-0.42	-0.46	
Serbia																								-0.04	0.08	0.11	0.07
Serbia and Montenegro									0.21	-0.33	-0.35	-0.36	-0.24	-0.18	-0.20	-0.27	-0.20	-0.14	-0.12	-0.08	0.02	0.05	-0.43				
Seychelles	-0.39	-0.39	-0.40	-0.40	-0.42	-0.43	-0.44	-0.44	-0.43	-0.43	-0.45	-0.46	-0.48	-0.49	-0.49	-0.50	-0.49	-0.50	-0.51	-0.52	-0.53	-0.54	-0.54	-0.54	-0.53	-0.53	
Sierra Leone	-0.39	-0.40	-0.40	-0.40	-0.42	-0.43	-0.43	-0.44	-0.41	-0.41	-0.42	-0.44	-0.45	-0.45	-0.46	-0.46	-0.45	-0.45	-0.45	-0.45	-0.47	-0.50	-0.49	-0.49	-0.50	-0.48	
Singapore	1.04	0.97	1.10	1.13	1.36	1.32	1.39	1.34	1.58	1.72	1.82	1.47	1.51	1.59	1.60	1.47	1.59	1.74	1.55	1.58	1.46	1.54	1.50	1.44	1.52	1.41	
Slovak Republic										-0.04	-0.01	0.02	0.07	0.07	0.10	0.11	0.18	0.19	0.26	0.29	0.41	0.44	0.47	0.53	0.59	0.49	
Slovenia									-0.04	0.08	0.13	0.17	0.22	0.21	0.25	0.25	0.34	0.35	0.41	0.42	0.58	0.54	0.56	0.61	0.66	0.56	
Solomon Islands	-0.39	-0.39	-0.40	-0.40	-0.42	-0.43	-0.43	-0.44	-0.43	-0.44	-0.46	-0.47	-0.49	-0.50	-0.50	-0.51	-0.51	-0.51	-0.52	-0.53	-0.56	-0.58	-0.58	-0.59	-0.59	-0.57	
Somalia	-0.39	-0.40	-0.40	-0.40	-0.42	-0.43	-0.44	-0.44	-0.43	-0.44	-0.46	-0.46	-0.49	-0.50	-0.50	-0.51	-0.50	-0.51	-0.51	-0.51	-0.54	-0.57	-0.57	-0.57	-0.58	-0.57	
South Africa	0.31	0.35	0.40	0.17	0.22	0.26	0.43	0.45	0.41	0.62	0.84	1.01	0.93	1.14	1.04	1.20	1.30	1.27	1.29	1.55	1.58	1.59	1.54	1.51	1.46	1.34	
South Georgia and the South Sandwich Islands																											
Spain	1.45	1.49	1.54	1.51	1.67	1.78	1.82	1.94	2.05	1.95	1.99	2.07	2.04	2.09	2.12	2.13	2.27	2.26	2.32	2.40	2.34	2.26	2.30	2.34	2.46	2.35	
Sri Lanka	-0.27	-0.28	-0.28	-0.27	-0.28	-0.27	-0.27	-0.26	-0.22	-0.22	-0.21	-0.13	-0.12	-0.10	-0.13	-0.10	-0.07	-0.09	-0.12	-0.12	-0.12	-0.10	-0.07	-0.10	-0.08	-0.17	
St. Kitts and Nevis	-0.39	-0.36	-0.37	-0.38	-0.42	-0.43	-0.44	-0.44	-0.43	-0.44	-0.45	-0.46	-0.49	-0.50	-0.50	-0.50	-0.50	-0.51	-0.50	-0.52	-0.55	-0.58	-0.57	-0.57	-0.58	-0.58	
St. Lucia	-0.38	-0.39	-0.39	-0.39	-0.40	-0.42	-0.42	-0.43	-0.42	-0.42	-0.44	-0.45	-0.47	-0.48	-0.49	-0.49	-0.47	-0.49	-0.50	-0.50	-0.52	-0.55	-0.56	-0.55	-0.56	-0.54	
St. Vincent and the Grenadines	-0.39	-0.39	-0.39	-0.40	-0.40	-0.42	-0.42	-0.43	-0.41	-0.43	-0.44	-0.46	-0.47	-0.46	-0.47	-0.48	-0.46	-0.50	-0.48	-0.51	-0.53	-0.56	-0.54	-0.54	-0.57	-0.47	
Sudan	-0.38	-0.38	-0.39	-0.39	-0.40	-0.42	-0.42	-0.43	-0.41	-0.42	-0.44	-0.44	-0.47	-0.48	-0.48	-0.49	-0.48	-0.48	-0.48	-0.48	-0.52	-0.53	-0.52	-0.52	-0.53	-0.53	
Suriname	-0.38	-0.38	-0.39	-0.39	-0.41	-0.43	-0.43	-0.43	-0.42	-0.42	-0.44	-0.45	-0.47	-0.48	-0.49	-0.49	-0.48	-0.49	-0.49	-0.50	-0.52	-0.53	-0.53	-0.53	-0.52	-0.54	
Swaziland																		-0.41	-0.40	-0.40	-0.40	-0.40	-0.37	-0.34	-0.34	-0.36	
Sweden	2.30	2.23	2.22	2.35	2.33	2.30	2.27	2.25	2.46	2.12	2.20	2.33	2.44	2.32	2.19	2.20	2.16	2.14	2.12	2.20	2.27	2.24	2.26	2.22	2.15	2.08	
Switzerland	3.84	3.72	4.03	4.02	3.90	3.85	3.75	3.75	3.99	3.93	3.94	3.90	3.90	3.68	3.57	3.64	3.61	3.61	3.66	3.60	3.56	3.57	3.39	3.33	3.46	3.83	
Syrian Arab Republic	-0.35	-0.35	-0.36	-0.37	-0.38	-0.38	-0.38	-0.37	-0.32	-0.32	-0.33	-0.33	-0.34	-0.33	-0.30	-0.30	-0.25	-0.25	-0.22	-0.22	-0.19	-0.20	-0.15	-0.16	-0.19	-0.24	
Tajikistan									-0.43	-0.44	-0.46	-0.45	-0.46	-0.48	-0.48	-0.49	-0.48	-0.48	-0.50	-0.51	-0.52	-0.55	-0.56	-0.56	-0.56	-0.55	

Country Name	1984	1985	1986	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009		
Tanzania	-0.37	-0.38	-0.38	-0.38	-0.39	-0.41	-0.41	-0.37	-0.40	-0.41	-0.39	-0.39	-0.42	-0.40	-0.41	-0.38	-0.38	-0.41	-0.38	-0.37	-0.38	-0.33	-0.32	-0.36	-0.33			
Thailand	0.15	0.18	0.19	0.30	0.42	0.47	0.48	0.50	0.58	0.67	0.71	0.68	0.66	0.73	0.74	0.82	0.96	1.04	1.02	1.04	1.00	1.07	1.08	1.07	1.12	1.09		
Timor-Leste	-0.40	-0.40	-0.41	-0.41	-0.42	-0.44	-0.44	-0.45	-0.44	-0.45	-0.46	-0.47	-0.50	-0.51	-0.51	-0.52	-0.52	-0.52	-0.53	-0.53	-0.56	-0.59	-0.59	-0.60	-0.59	-0.58		
Togo	-0.39	-0.39	-0.39	-0.40	-0.41	-0.42	-0.42	-0.42	-0.42	-0.43	-0.44	-0.44	-0.47	-0.47	-0.48	-0.49	-0.45	-0.43	-0.44	-0.43	-0.45	-0.41	-0.43	-0.49	-0.50	-0.54		
Tokelau	-0.40	-0.40	-0.41	-0.41	-0.42	-0.43	-0.43	-0.44	-0.43	-0.44	-0.46	-0.47	-0.49	-0.50	-0.50	-0.50	-0.49	-0.50	-0.51	-0.51	-0.53	-0.55	-0.55	-0.56	-0.56	-0.54		
Tonga	-0.40	-0.40	-0.40	-0.41	-0.42	-0.43	-0.43	-0.44	-0.43	-0.44	-0.46	-0.47	-0.49	-0.50	-0.51	-0.51	-0.52	-0.52	-0.53	-0.53	-0.56	-0.59	-0.59	-0.59	-0.59	-0.58		
Trinidad and Tobago	-0.32	-0.32	-0.32	-0.29	-0.32	-0.33	-0.34	-0.32	-0.32	-0.29	-0.31	-0.31	-0.34	-0.30	-0.32	-0.27	-0.17	-0.20	-0.22	-0.25	-0.26	-0.21	-0.20	-0.21	-0.24	-0.30		
Tunisia	-0.27	-0.26	-0.26	-0.26	-0.27	-0.26	-0.24	-0.25	-0.22	-0.22	-0.21	-0.21	-0.18	-0.22	-0.20	-0.20	-0.18	-0.18	-0.15	-0.12	-0.10	-0.09	-0.08	-0.07	-0.05	-0.08		
Turkey	-0.07	-0.05	-0.04	-0.01	0.00	0.07	0.07	0.05	0.15	0.15	0.22	0.31	0.43	0.47	0.51	0.55	0.73	0.73	0.77	0.80	0.99	0.97	1.00	1.07	1.11	1.01		
Turkmenistan									-0.43	-0.44	-0.45	-0.46	-0.48	-0.48	-0.48	-0.49	-0.48	-0.48	-0.50	-0.52	-0.53	-0.56	-0.57	-0.57	-0.56	-0.56		
Turks and Caicos Islands	-0.40	-0.40	-0.41	-0.41	-0.42	-0.44	-0.44	-0.45	-0.43	-0.44	-0.46	-0.47	-0.49	-0.50	-0.50	-0.51	-0.50	-0.51	-0.51	-0.52	-0.54	-0.56	-0.56	-0.57	-0.57	-0.57		
Tuvalu	-0.40		-0.41	-0.41	-0.42	-0.44	-0.44	-0.45	-0.44	-0.45	-0.47	-0.47	-0.50	-0.51	-0.51	-0.52	-0.52	-0.48	-0.49	-0.53	-0.56	-0.59	-0.59	-0.60	-0.60	-0.59		
Uganda	-0.39	-0.40	-0.40	-0.40	-0.42	-0.43	-0.43	-0.44	-0.42	-0.43	-0.45	-0.45	-0.46	-0.45	-0.46	-0.46	-0.48	-0.47	-0.47	-0.44	-0.45	-0.43	-0.41	-0.42	-0.42	-0.29		
Ukraine									-0.30	-0.20	-0.10	-0.06	0.00	-0.03	0.03	0.04	0.12	0.17	0.19	0.15	0.29	0.35	0.36	0.38	0.36	0.30		
United Arab Emirates	-0.23	-0.21	-0.24	-0.14	-0.15	-0.06	-0.06	-0.07	0.04	0.12	0.22	0.40	0.46	0.69	0.61	0.65	0.76	0.80	0.86	0.80	0.98	1.10	0.98	1.00	0.99	0.98		
United Kingdom	4.42	4.55	4.48	4.53	4.57	4.39	4.52	4.50	4.61	4.50	4.46	4.45	4.31	4.42	4.64	4.42	4.64	4.45	4.43	4.43	4.39	4.12	4.11	4.06	3.98	3.74		
United States	6.44	6.36	5.57	5.25	5.11	5.05	4.74	4.75	4.95	5.09	5.05	4.67	4.55	4.85	4.94	4.96	5.30	5.32	5.24	5.05	4.57	4.61	4.86	4.99	4.74	4.88		
United States Minor Outlying Islands									-0.43											-0.51	-0.51	-0.52	-0.52	-0.55	-0.56	-0.57	-0.58	-0.46
Uruguay	-0.28	-0.29	-0.28	-0.29	-0.32	-0.26	-0.28	-0.27	-0.24	-0.24	-0.23	-0.27	-0.31	-0.28	-0.30	-0.30	-0.27	-0.30	-0.28	-0.28	-0.29	-0.20	-0.24	-0.24	-0.26	-0.22		
Uzbekistan									-0.43	-0.43	-0.44	-0.43	-0.41	-0.44	-0.44	-0.45	-0.42	-0.43	-0.43	-0.44	-0.46	-0.47	-0.48	-0.48	-0.47	-0.48		
Vanuatu	-0.40	-0.40	-0.40	-0.41	-0.42	-0.44	-0.43	-0.45	-0.43	-0.44	-0.46	-0.47	-0.49	-0.50	-0.51	-0.51	-0.51	-0.52	-0.53	-0.53	-0.55	-0.58	-0.58	-0.59	-0.59	-0.58		
Venezuela, RB	-0.30	-0.31	-0.26	-0.28	-0.28	-0.25	-0.20	-0.17	-0.14	-0.11	-0.12	-0.17	-0.19	-0.15	-0.18	-0.13	-0.14	-0.17	-0.16	-0.17	-0.18	-0.08	-0.12	-0.18	-0.19	-0.23		
Viet Nam	-0.38	-0.38	-0.38	-0.38	-0.38	-0.39	-0.39	-0.37	-0.31	-0.26	-0.26	-0.23	-0.19	-0.18	-0.14	-0.11	-0.04	0.00	0.02	0.04	0.07	0.08	0.12	0.18	0.27	0.26		
Virgin Islands (British)	-0.40	-0.40	-0.40	-0.41	-0.42	-0.43	-0.43	-0.41	-0.42	-0.43	-0.45	-0.45	-0.46	-0.47	-0.47	-0.49	-0.46	-0.47	-0.47	-0.48	-0.50	-0.52	-0.52	-0.51	-0.52	-0.53		
Wallis and Futuna Islands	-0.40	-0.40	-0.41	-0.41	-0.43	-0.44	-0.44	-0.45	-0.43	-0.45	-0.46	-0.48	-0.50	-0.51	-0.51	-0.52	-0.52	-0.52	-0.54	-0.54	-0.56	-0.60	-0.60	-0.60	-0.60	-0.59		
Western Sahara	-0.40	-0.40	-0.41	-0.41	-0.43	-0.44	-0.44		-0.44	-0.45	-0.47	-0.48	-0.50	-0.51	-0.51	-0.52	-0.51	-0.52	-0.53	-0.53	-0.57	-0.60	-0.60	-0.61	-0.60	-0.59		
Yemen, Rep.	-0.39	-0.38	-0.39	-0.40	-0.41	-0.42	-0.44	-0.43	-0.40	-0.41	-0.44	-0.44	-0.46	-0.48	-0.47	-0.47	-0.47	-0.46	-0.47	-0.46	-0.48	-0.50	-0.49	-0.50	-0.52	-0.51		
Zambia	-0.38	-0.38	-0.38	-0.39	-0.41	-0.42	-0.41	-0.42	-0.39	-0.40	-0.41	-0.41	-0.42	-0.44	-0.45	-0.44	-0.45	-0.45	-0.46	-0.47	-0.45	-0.45	-0.48	-0.47	-0.46	-0.44		
Zimbabwe	-0.34	-0.34	-0.34	-0.33	-0.35	-0.35	-0.34	-0.35	-0.29	-0.28	-0.23	-0.18	-0.31	-0.25	-0.25	-0.23	-0.20	-0.21	-0.24	-0.26	-0.31	-0.31	-0.34	-0.36	-0.41	-0.41		