

# **Industrial policies to escape from the middle income trap: cases of Uruguay and Malaysia.**

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The post-war period of the twentieth century saw a rapid transition of substantial number of countries around the world to the status of middle income countries. This brought to the light the phenomenon of emerging countries. However, for some countries the dynamic nature of this phenomenon was replaced by the slowdown in the next step of transition to the high income status. According to the World Bank (2012), of 101 middle-income economies in 1960, only 13 became high income by 2008. Other countries, thus, were caught in what was coined as the "middle income trap".

The difference of the middle income trap phenomenon from the natural implications of decreasing marginal returns to investment in physical capital is that the former is essentially a productivity growth slowdown (Eichengreen et al, 2011). A common explanation for this slowdown (Canuto, 2011; Agenor et al, 2012 and World Bank 2012) is the saturation of the factors and advantages that generate high growth during the initial phase of rapid development when the middle- and upper-middle-income levels are reached. That happens because growth slowdowns coincide with the point in the growth process where it is no longer possible to boost productivity by shifting additional workers from agriculture to industry and where the gains from importing foreign technology diminish significantly (Agenor et al, 2012). As a solution to the situation, it is required to find new sources of growth to maintain sustained increases in per capita income.

In this regard Felipe et al (2012) demonstrate that the countries that jumped from lower-middle-income status or from upper- middle-income had, in general, more diversified, sophisticated, and non-standard export baskets at the time of the transition than the countries stuck in the middle-income trap. As Hidalgo et al (2007) and Hidalgo and Hausmann (2009) show using the network theory methods, the development trajectory of a country is dependent on its capacity to produce varied and, in particular, more sophisticated goods. Thus, the success of countries in avoiding or escaping from middle-income trap largely depends on the industrial development and innovation promotion policies that they carry.

In this paper, therefore, we review industrial and innovation policies aimed at avoiding or escaping from middle-income trap. For this purpose we focus on two countries: Uruguay and Malaysia. One of the countries - Uruguay - recently succeeded in escaping from middle-income trap, while the other still remains there.

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Thus, Uruguay and Malaysia represent two opposite examples of policies needed to escape from the middle-income trap.

Uruguay adopted several productive development policies since 1990s such as joining Mercosur, a regional customs union with Argentina and Brazil in 1990s, and the institutional reform package in 2000s that was aimed at attracting foreign direct investments, increasing export diversification and fostering an innovation supporting environment (Barrios et al 2010). That package of reforms allowed the country to recover from the financial crises of 1994 and 2002 to show high level of growth and increased productivity.

Malaysia went through the rapid industrialization process from 1960 to 1990. The initial stages of this process consisted of import-substitution and export-orientation. At the end of this journey Malaysia adopted a heavy industrialization program aimed at boosting exports and supporting national car industry (Hill et al 2012). These policies brought some important achievements, such as substantial reduction in the poverty rates. Yet, Malaysian government was unable to move up the value chain. This problem is represented by the failure to develop an industry well connected with the rest of the economy. As a consequence of this, Malaysia was unable to divert the effects of economic recessions it suffered in 1980-1985, 1997 and 2008.

This study provides the analyses of industrial and innovation policies in Uruguay and Malaysia in order to fragmentize the elements of successful policies against the middle-income trap phenomenon. The definition of middle-income trap used in paper is the one provided by Felipe et al (2012): a country is in the lower-middle-income trap if it has been a lower-middle-income country for 28 or more years; and it is in the upper-middle-income trap if it has been an upper-middle-income country 14 or more years. The income classification of countries used in paper is the one provided by the World Bank (2012): a country is low-income if its GNI per capita is \$1,035 or less, lower-middle-income if its GNI per capita lies between \$1,036 and \$4,085, upper-middle-income if its GNI per capita lies between \$4,086 and \$12,615, and high-income if its GNI per capita is \$12,616 or above. Under this classification, 36 out of the 124 countries in the sample were considered low-income in 2012, 48 lower-middle-income, 55 upper-middle-income, and 75 high-income.

The paper consists of four chapters and is organized as follows. The first chapter provides the literature review of the studies on the middle-income trap. The second chapter studies the case of the middle-income trap in Malaysia. This is followed by the analogous chapter dedicated to Uruguay. The final chapter draws conclusions from preceding chapters.

## Literature review

The problem of middle-income trap has gained some academic attention in last few years (See publications by Ohno, 2009; Eichengreen et al, 2011; Spence, 2011; Agenor and Canuto, 2012; Felipe et al, 2012; Jankowska et al, 2012; Tho, 2013; Aiyar, 2013; Im and Rosenblatt, 2013; etc). In general, these papers define the middle income trap as a phenomenon, which occurs when a country's growth stagnates after the transition from low-income country to middle-income country. This happens when the country is no longer able to compete with low income, low wage economies in manufacturing exports, but is still unable to compete with advanced economies in high skill innovations. The solution to the situation, therefore, requires finding new sources of growth over time to maintain sustained increases in per capita income.

This means shifting resources from low-productivity into high-productivity activities. For that, as evidence suggests, it is essential for countries in the middle-income trap to develop comparative advantage in “sophisticated and well-connected” types of products (Hidalgo et al, 2007; and Hidalgo and Hausmann, 2009; Felipe et al, 2012). These products are subject to increasing returns to scale, they have high income elasticity of demand, and their markets are imperfect. Therefore, they are the ones that place a country on an automatic upward trajectory (Rodrik, 2011).

The examples of practical implementations of policies to avoid falling into middle-income trap prove this point. Several East Asian countries such as Hong-Kong, Japan, Korea, Taiwan, China, and Singapore experienced high sustained growth rates in the second half of the XX century that rapidly transformed them into high-income status (Figure 1).

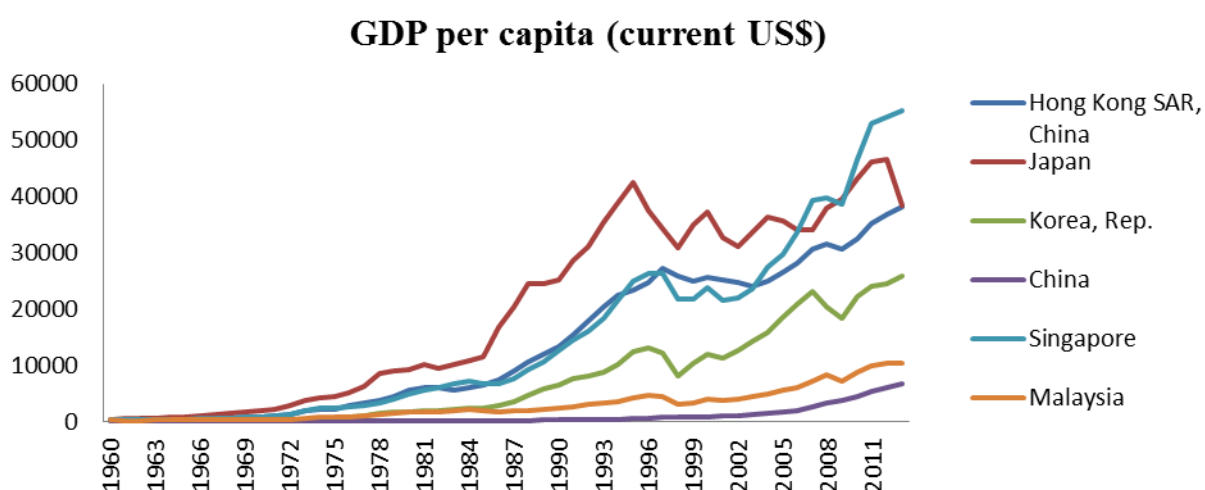


Figure 1. High performing Asian countries

Source: World Bank

Weiss (2005) notes that the development of high-technology and knowledge-intensive industries was critical for their economic take off. He finds that all of high-performing East Asian countries started with a focus on production of technologically

simple labour-intensive goods – clothing, sports goods, toys, processed foods and so forth. Then, although the speed of graduation from these products varied, they would always move into a range of more capital-intensive, technologically sophisticated items. Table 1 shows three such cases.

**Table 0.1. Industrial development in Asian countries**

<b>South Korea</b>	<b>Taiwan</b>	<b>Singapore</b>
<b>1961-1973</b> Initial export take-off	<b>1953-1957</b> Import substitution	<b>1959-1964</b> Labour-intensive import substitution
<b>1973-1979</b> Heavy and chemical industry development. Selective promotion.	<b>1958-1972</b> Export promotion	<b>1967-1973</b> Labour-intensive export promotion
<b>1980-1990</b> Gradual trade liberalisation. Move to less selectivity.	<b>1973- 1976</b> Industrial consolidation	<b>1973-1984</b> Upgrading export structure
<b>1990-onwards.</b> Trade liberalisation and high-tech exports	<b>1981–onwards</b> high-tech industrialization	<b>1985-onwards</b> Export promotion of high-tech and services

How does the strategy of shifting to production of high-technology products proceed? Ohno (2009) describes this process in four stages. At the initial stage countries need to attract foreign firms that would perform simple assembly or processing of light industry products for export such as garment, footwear, and foodstuff. At this early stage key materials and parts are imported, and the home country contributes only unskilled labour and industrial land. Thus, internal value remains small and value created by foreigners dominates.

The task of the second stage is to accumulate sufficient number of manufacturing FDI and expand production. This will lead to the increase in domestic supply of parts and components, partly due to the inflow of FDI suppliers and partly due to the emergence of local suppliers. As this occurs, assembly firms become more competitive and the industry grows quantitatively. Internal value creation rises moderately, but production basically remains under foreign management and guidance. Because of that local wage and income cannot rise very much.

The challenge of the next step is to internalize skills and knowledge by accumulation of industrial human capital. Foreign dependence should be reduced and internal value should be significantly increased. As a result, the country should emerge as a dynamic exporter of high-quality manufactured products challenging more advanced competitors and re-shaping the global industrial landscape.

In the final stage, the country acquires the capability to create innovative products and lead global market trends. Japan, the United States, and some members of the European Union are such industrial innovators.

According to Felipe et al (2012), this strategy of moving into production of technologically sophisticated goods was crucial for the success of the best-performing East Asian countries. They find that South Korea exported more new sophisticated products than Malaysia and the Philippines did in 5-year periods spanning from 1965 to 2005 (36 in comparison to 13 and 14 respectively). By 1975, Korea had gained comparative advantage in 162 products (46 in sophisticated products, mainly machinery and metals); by the mid-1980s, in about 200 products. As a result, in 1988 Korea became an upper middle-income country, 8 years ahead of Malaysia, and in 1995 it became a high-income country (the Philippines and Malaysia remain low-income and an upper-middle income country respectively).

Most often the development of high-technology and knowledge intensive products requires capabilities that the country does not possess. If that is the case, lack of knowledge and expertise may halt country's push of technological frontiers. This situation may be further worsened by the lack of institutional frameworks that preserve and recreate knowledge and expertise. Indeed, Ohno (2009) himself marks out the third stage – internalization of skills and knowledge – as the stage where barriers for further development occur and countries fall into the middle income trap.

Therefore, one of the crucial measures to avoid middle-income trap is to direct policy efforts to upgrade the education system and develop institutes necessary to cultivate the ability of countries to move from imitating and importing foreign technologies to innovating technologies of their own. Page (1994) explains that in most of the economies of East Asia, public investments in education were larger than elsewhere in absolute terms. For example, in Korea between 1970 and 1989, real expenditures per pupil at the primary level rose by 355% (Birdsall and Sabot, 1993)! Most importantly, however, the public investments to education were very effective. Stevenson and Stigler (1992) report that performance of children on tests of cognitive skills, standardized across economies, shows that East Asian children tend to perform better than children from other developing regions-and even, recently, better than children from high income economies (Page, 1994).

As Page (1994) explains, this effectiveness of public investment to education was due to the fact that the share of public expenditure allocated to basic education was consistently higher in East Asia than elsewhere. Moreover, some high-performing East Asian economies were also unusually large-scale importers of educational services, particularly in vocationally and technologically sophisticated disciplines (World Bank, 1993). This allowed firms to have an easier time upgrading the skills of their workers and mastering new technology (Page, 1994). The result of these policies was formation of a broad, technically inclined human capital base well-suited to rapid economic development (World Bank, 1993).

Development of high-quality institutions is no less important for sustained growth than high-quality education. That is because high-quality institutions form critical framework for innovative and flexible private sector. This is, in turn, essential for effective reallocation of productive factors in higher productivity activities, with more skilled labour and technological capacities. According to the World Bank report (1993), this was the case in all of the best-performing East Asian countries, where high levels of growth were due to the creation of secure institutional environments for private investments. Namely, the report stresses the importance of forming reputable bureaucracy through making public sector wages competitive, establishing merit based recruitment and promotion procedures and by raising the status of public service.

What are other institutions necessary to avoid falling into the middle-income trap? Rodrik (2007) summarized them as the following: good governance; effective corporate governance; wide participation of various stakeholders in the policy decision process; effective cooperation among academics, businesses, and government in the formation of strategy for strengthening international competitiveness; efficient and transparent relationship between government and businesses; and increasing investment in research and development (R&D). More specifically, Aiyar et al (2013), using the probit analysis on the sample of 138 countries, find that good legal system, contract enforcement and property rights, as well as small scale of government involvement in the economy, are strongly associated with a reduced probability of growth slowdown episodes.

So far, policies against the middle-income trap were discussed in relation to East Asian countries that managed to avoid it. This is in contrast to one country which is usually discussed in relation to unsuccessful policies of escaping from the middle-income trap – Malaysia. According to the methodology of Felipe et al (2012), Malaysia is the only upper middle-income country among Asian countries that are considered to be in the middle-income trap (the others being the Philippines, Sri-Lanka, Iran, Jordan, Lebanon, Malaysia and Yemen). Since the Asian region contains most dynamically developing countries, which are at the same time wary of falling into the middle-income trap, this study focuses on Malaysia to discuss policy failures in escaping from the middle-income trap.

The policies of Malaysia are compared to policies to tackle the middle-income trap in Uruguay. That is because, according to the World Bank, in 2013 Uruguay along with other four countries - Chile, Latvia, Lithuania and Russian Federation - changed its status from the upper-middle income to the high-income class. However, among these countries, Uruguay was the only one that had been in the middle-income trap prior to the transition. In fact, it was a middle-income country for over a century: it turned a lower middle-income country in 1882 and became upper-middle income country only in 1994. Thus, Uruguay had retained the status of upper-income country for 18 years before graduating in 2012. Therefore, this country is studied in this paper as a unique example of a country that escaped from the middle-income trap.

To sum up, policies to avoid or tackle the middle-income trap should be focused on shifting resources from low-productivity into high-productivity activities. As successful examples from East Asian countries reveal, this means developing strategies of cultivating production of technologically sophisticated products. This, in its turn, requires countries to possess the necessary knowledge and expertise. Therefore, the strategies against the middle-income trap should include investments into development of human capital. For growth to be sustainable, it is important that developing countries developed effective institutions for flexible private sector. Such institutions should range from good governance to good legal system, contract enforcement and property rights. Finally, overview of different countries by income groups reveals that there are two countries that of interest in relation to discussion of the problem of the middle-income trap – Malaysia and Uruguay. These countries present two diametrical examples of effectiveness of country policies against the middle income trap. Therefore, the next chapters are dedicated to these countries.

### Malaysia

Malaysia began its journey towards achieving high-income status in 1966 when the First Malaysia Plan was adopted. However, 48 years past, it is still on the way to achieve this target. There are several reasons for that. First of all, it is due to flaws in the industrial policy. Although, the industrial policies of Malaysia had some substantial achievements (manufacturing rose from 13,4% to 30,5% as a share of GDP), they contained inefficiencies in the implementation. Second reason is due to the fallacies in the New Economic Policy adopted by the government of Malaysia in 1971. While it was aimed at eradicating poverty and disseminating equality, it put too much emphasis on wealth redistribution restricting the economic growth. Finally, the economic growth in Malaysia was staggered by several episodes of recession in the world economy (look at the periods of 1980-1985, 1997 and 2008 in the Figure 2). The effects of these events were worsened by economic inefficiencies due to the reasons described above.

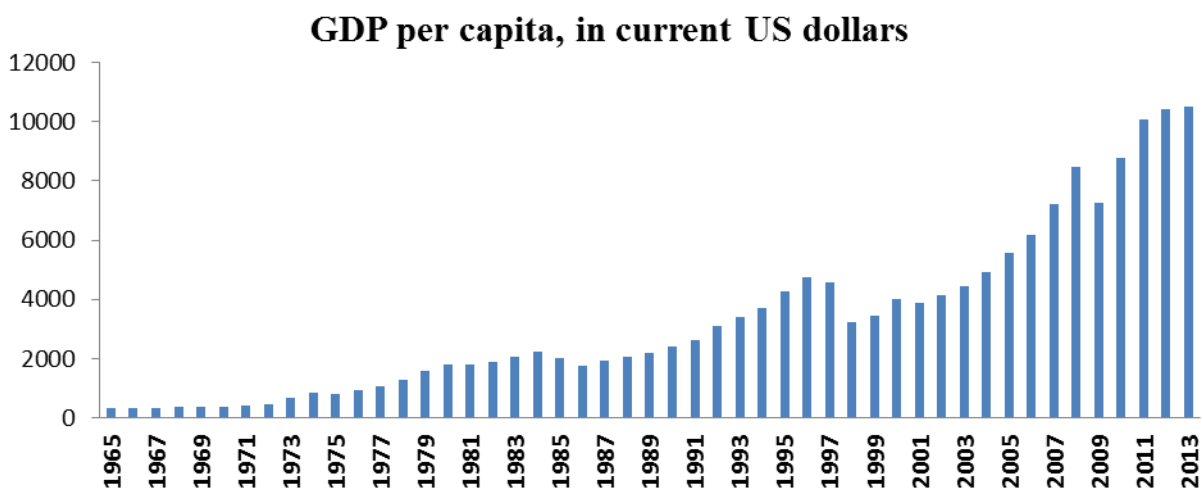


Figure 02. GDP per capita, 1965-2013, in current US dollars

Source: World Bank

Malaysia had three notable stages of industrialisation: import-substitution, export-orientation and push for heavy industry. The first two stages ran from the 1960s to 1980. While they were essential for increasing the diversification and employment capacity of the economy, however, they had flaws inconsistent with developing a quality industrial sector. For import-substituting industries these flaws were the following (Jomo, 2002):

- the goods were produced predominately for the domestic market
- high protective barriers (the subsidy equivalent of protection for 1969 was about M\$300 million - just fewer than 4 per cent of GDP, or about 14% of total government operating expenditure (Edwards (1975:1998))
- limited employment-generating capacity owing to the utilisation of typically capital-intensive foreign technology
- weak linkages of these industries with the rest of the national economy due to little sophistication of their products
- small domestic market.

It is worth noting here that providing high protection to industries represents the case of the failed “picking winners” strategy, or the “infant industry” strategy. This means that the government irrationally picked up industries for development, hiding it from foreign competitors behind protective barriers. As a result, such industries become inefficient and lose connection with other parts of the economy. This problem would persist in Malaysian manufacturing sector throughout the rapid industrialisation period.

The limitations of the import substitution strategy led to the domestic market quickly becoming saturated. In contrast, export-oriented industrialisation, which came in place of import-substitution, tends to generate more employment directly. However, such industries are, in general, more sensitive to changes in wage costs. That is because they are considered to be ‘footloose’ - i.e. easily capable of relocating if sufficiently attracted by circumstances elsewhere. For that reason, the government tries to ensure that the investment climate remains attractive for investment (Jomo, 2002). These observations were true for Malaysia as well, since by the late 1970s the manufacturing wage rates there were well behind the East Asian newly industrialized countries, as Table 2 shows.



**Table 2. Salaries and Wages in Malaysia and other Asian countries**

<b>Economy</b>	<b>Growth rate of real manufacturing in the 1970s (%)</b>	<b>Average monthly salaries of industrial workers, 1978 (US\$)</b>
S. Korea	9,0	316
Taiwan	7,2	165
Hong Kong	2,4	254
Singapore	6,5	198
Malaysia	1,4	150

Source: Hamilton (1986: Table 5)

In addition, the composition of the manufacturing sector at the time reveals that it was dominated by unsophisticated production: electrical components assembly (50%) and textile manufacturing (12%). This led to persistence of the weaknesses in the integration of the industrial sector products with products from other sectors of the economy. Finally, export-oriented industrialisation led to the total trade exceeding 50% of GDP in 1980 (Bowie, 1988). As a consequence, in 1980-1982 following the worldwide recession in 1980 the country's terms of trade declined by 15%. This was followed by the growth slowdown episode which lasted from 1980 to 1985 (Aiyar et al, 2013).

In response to such patterns in the economy, by the 1980s the government of Malaysia declared policies of pushing for heavy industrialisation. The emphasis was made on developing sophisticated, capital-intensive heavy-industries such as: steel, cement, sponge iron, heavy engineering, pulp and paper, small engines and auto manufacturing. To promote these industries the government established the Heavy Industries Corporation of Malaysia (HICOM).

As a result of the policy push for heavy industrialization, according to Felipe et al (2012), Malaysia made a significant progress in producing sophisticated products: in the period from 1985 to 1990 Malaysia produced more new sophisticated products than before and even after.

**Table 3. New manufacturing products in Malaysia**

	<b>Sophisticated products</b>	<b>Near products</b>	<b>sophisticated</b>	<b>Unsophisticated products</b>
<b>1965-1970</b>	1		6	9
<b>1970-1975</b>	3		6	15
<b>1975-1980</b>	2		4	7

<b>1980-1985</b>	2	7	18
<b>1985-1990</b>	2	15	34
<b>1990-1995</b>	-	5	18
<b>1995-2000</b>	-	4	15
<b>2000-2005</b>	3	6	13

Source: Felipe et al (2012)

Along with these achievements, however, the push for heavy industrialisation had its own weaknesses and inefficiencies. By the late 1980s, over RM42 billion had been invested in various projects that generated less than 5,000 jobs directly (on average RM400, 000 per job), and exports from these industries were negligible (Chee, 1994). Some industries on which the government put emphasis, such as Malaysian car project, required substantial government protection due to stiff international competition (Bowie, 1988). Moreover, the new industries were characterised by low capacity utilisation of the plants which led to weak linkages with the rest of the economy (Ariff and Semudram, 1987: 46, 47).

In addition to the above, most of the investments into heavy industry were financed by external borrowing. According to the World Bank, this led to the rapid increase in the net public foreign borrowing from 10 per cent in 1980 to more than 38 per cent in 1986 (Ministry of Finance, Economic Report (1981: x, xi; 1983: xiii; and 1989: x, xi, xiv, xv, xii)). But, as a negative effect, the external financing gave support to Malaysia's real effective exchange rate appreciation through the first half of the 1980s (Wood (1988: 106, 127); World Bank (1987: 13)).

These weaknesses of heavy industrialisation highlighted the inefficiency of an active government involvement in the economy at the time. As a consequence of this, when the prices of all major export commodities collapsed in 1985, Malaysian economy was not able to respond adequately. The resulting contraction in GDP at 1,1% was the worst performance ever recorded. At the same time, the uncertainty of the economic situation dampened both local and foreign private investments (Menon, 2008). This situation consequently led to changes in the economic policy in general.

The period of rapid industrialisation of Malaysia from 1965 to 1990 to the most part of it coincided with the New Economic Policy adopted in 1971. This policy consisted of two parts: poverty reduction and inter-ethnic occupational and wealth 'restructuring' through government intervention. As a result of this policy, poverty in Malaysia was reduced from 49,3% in 1970 to 5,1% in 2002 (!) (Jomo, 2004); and indigenous population group share ownership rose from 1,5% in 1969 to 18,7% in 2002.

However, the NEP is often accused of placing the wealth redistribution ahead of the wealth creation. Particularly Woo (2009) points out to the following fallacies:

- Denying top leadership positions to Chinese and Indians institutionalises discrimination and amounts to employing less than 60 percent of the national talent pool (Woo, 2009).
- Ethnic quotas on ownership structure either discourages successful Chinese Malaysian firms from tapping local stock market to fund expansion or drives Chinese Malaysian firms to move headquarters to foreign lands. This is why, unlike the Taiwan case, there are very few Malaysian firms that have moved from producing import-substituting (import-competing) goods to become major exporters of these goods.
- Ethnic quotas on bank loans, business licenses, government contracts, and employment allows corruption to thrive throughout society and lead to side effects, such as the perpetual infant industry phenomenon, “money politics”, and increasingly frequent outrageous rulings by the Malaysian courts.

Needless to say, these drawbacks of the NEP effectively put limits on the economic growth and on the effectiveness of industrial policies in increasing the per capita GDP growth. Most importantly, inefficiencies of the NEP once more demonstrate the harms of active government interventions to the economy.

Because of that, the NEP was subsequently replaced in 1990 by the National Development Policy, which called for greater involvement of the private sector. The new paradigm clearly favoured no more than minimal government participation in private sector. The dictum was fairly straightforward: it is not the business of the government to be in business; the business of the government is to govern (Ariff, 1998). This led to a significant reduction in government expenditure and a shift towards infrastructure projects designed to enhance private sector development in the Fifth (1986-90) and Sixth (1991-95) Malaysia Plans. As a result by 2000 the services sector amounted to 52,4% of the GDP (Review of the Second Outline Perspective Plan, 1991-2000).

**Table 5. GDP composition, in %**

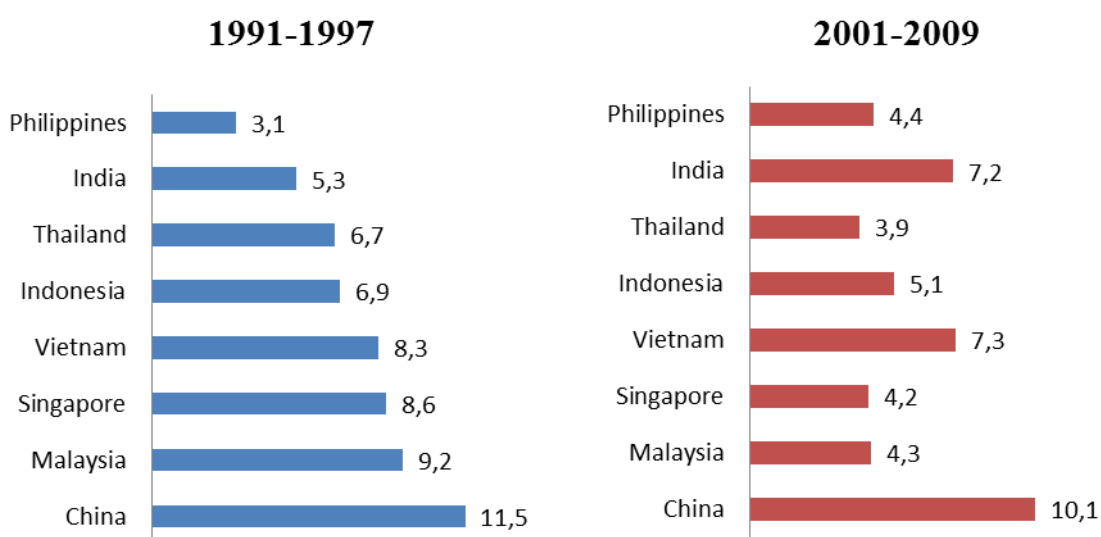
	<b>1990</b>	<b>Target</b>	<b>Achieved 2000</b>
<b>Agriculture &amp; Forestry</b>	16,3	13,4	8,7
<b>Mining</b>	9,4	5,7	6,6
<b>Manufacturing</b>	24,6	37,2	33,4
<b>Construction</b>	3,5	3,5	3,3

Services	46,8	45,4	52,4
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**Table 6. Employment by sector, in %**

	1990	Target	Achieved 2000
Agriculture & Forestry	26,0	20,0	15,2
Mining	0,5	0,5	0,4
Manufacturing	19,9	23,9	27,6
Construction	6,3	7,4	8,1
Services	47,3	48,2	48,7

The effectiveness of this policy is also demonstrated by the average growth rate per annum at 9,2% in the period from 1991 to 1997, which was the second highest rate of growth in the region after China.



**Figure 3. GDP per annum growth rates, in %**

**Source: IMF World Economic Outlook, 2010**

However, the breakdown of the Asian financial crisis thwarted this spectacular performance. As a result, in 1998 the economy suffered a severe contraction, due to the significant decline in aggregate demand. Unfortunately, the average growth rates preceding the Asian crisis have not been recovered as of 2010.

This relatively poor growth performance was due to slow labour productivity growth, as acknowledged in the report by the National Economic Advisory Council (New Economic Model for Malaysia, 2010). The report by the National Economic Advisory Council provides two reasons for slow labour productivity growth in Malaysia: insufficient private investment and low human capital development. Private investment grew at just 2% per year in 2006-2010 rather than the 10%

projected in the Ninth Malaysia Plan. The reasons for such sluggish growth were acknowledged to be the high costs of doing business in Malaysia, lengthy bureaucratic procedures, investors' concern about the availability of skilled professionals and inadequate opportunities for investment (Economic Transformation Programme, 2010).

Regarding human capital development, Jomo (2002) points out that although Malaysia made substantial investments into education, much of that was spent on tertiary education, especially abroad, with little emphasis on skill development at intermediate levels, innovation and adaptation. As a reflection of such approach to human capital development, the literacy rate in Malaysia had been significantly lower in Malaysia than in successful East Asian countries. Particularly, Table 8 shows that literacy rates started improving in Malaysia later than in those countries. Therefore, the labour market in Malaysia was characterised by its reliance on a low-cost, low-skilled workforce (New Economic Model, 2010).

**Table 8. Literacy rates in Asian countries**

<b>Economy</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>
S. Korea	96	98	99
Thailand	93	95	97
Hong Kong	90	96	97
Singapore	84	94	96
Malaysia	60	87	91

Source: United Nations Economic and Social Commission for Asia and the Pacific

These developments in labour productivity are exemplified by the inability of Malaysia to develop sophisticated products (Table 3). As a result of this, inter-industrial linkages were more weakly developed in the Malaysian economy than in other Asian countries, which meant more inferior economic growth. For example, in contrast to Malaysia (Table 7), South Korea made more jumps into developing sophisticated products. This allowed it to become high middle-income by 1988 – 8 years ahead of Malaysia.

**Table 7. New manufacturing products in Malaysia and South Korea**

	Sophisticated products		Near sophisticated products		Unsophisticated products	
	Korea	Malaysia	Korea	Malaysia	Korea	Malaysia
<b>1965-1970</b>	1	1	5	6	11	9
<b>1970-1975</b>	9	3	13	6	24	15
<b>1975-1980</b>	6	2	18	4	19	7
<b>1980-1985</b>	5	2	6	7	12	18
<b>1985-1990</b>	4	2	7	15	23	34
<b>1990-1995</b>	3	-	18	5	21	18
<b>1995-2000</b>	2	-	10	4	25	15
<b>2000-2005</b>	6	3	10	6	11	13

Source: Felipe et al (2012)

This last observation in essence concludes the study of the reasons for Malaysia being stuck in the middle-income trap. The excursion to the process of industrialisation of Malaysia revealed that this process was accompanied by ineffective government policies. In particular, the government failed to create competitive manufacturing sector with strong linkages with the rest of the economy. Moreover, it allowed for interruptions to this process by pursuing wealth redistribution policies instead of focusing solely on wealth creation. This situation was made worse by the failure of the government to develop human capital in line with their industrial aspirations. Resulting in low labour productivity, this led to the inability of Malaysia to resist to economic doldrums and thus led to the country being stuck in the middle-income trap.

### **Uruguay**

Uruguay, having preserved its democratic system and political stability, managed to maintain economic growth throughout the crisis of 2002. The key factors that allowed this small Latin American country from the middle income trap were the democratic and inclusive institutions. The new strategy of industrial reforms has achieved success in attracting investments, increasing exports and creating technological clusters mainly due to political and macroeconomic stability that was maintained by the institutions. Moreover, the critical factor that underpinned the industrial strategy was a high level of coordination and collaboration with the private sector that was again provided by the inclusive nature of institutions. At the same time, during the crisis of 2002 the government did not abandon its social policies; by contrast, it enlarged its investments in education, health and innovation. The investments in

social policies strengthened the political stability in the country and the resilience of the institutions while improving the human capital conditions for the new industrial policy.

Uruguay in the recent 25 years has experienced a strong and inclusive economic growth thanks to the important institutional reforms, friendly business environment and stable macroeconomic environment. After the financial crisis of 2002 Uruguay has seen a decade of very strong growth that lifted country out of the middle income trap. Gross national income per capita has soared from 6000 USD in 1990 to more than 18500 USD in 2013 making Uruguay a high income country (Figure 1). Overall, Uruguay has experienced the transition from inward-looking, based on import substitution protectionist policies to outward-looking, based on the use of market mechanisms and the promotion of exports. Furthermore, the inclusive character of institutions in Uruguay resulted in a series of social policies that encouraged progressivity and coverage for the all groups of society. There are three major factors that underlined the transformation of Uruguay and its break from the middle income trap: the quality of democratic and inclusive institutions, exports promotion, innovation policy and foreign direct investment attraction and the last not least the inclusive social policies.

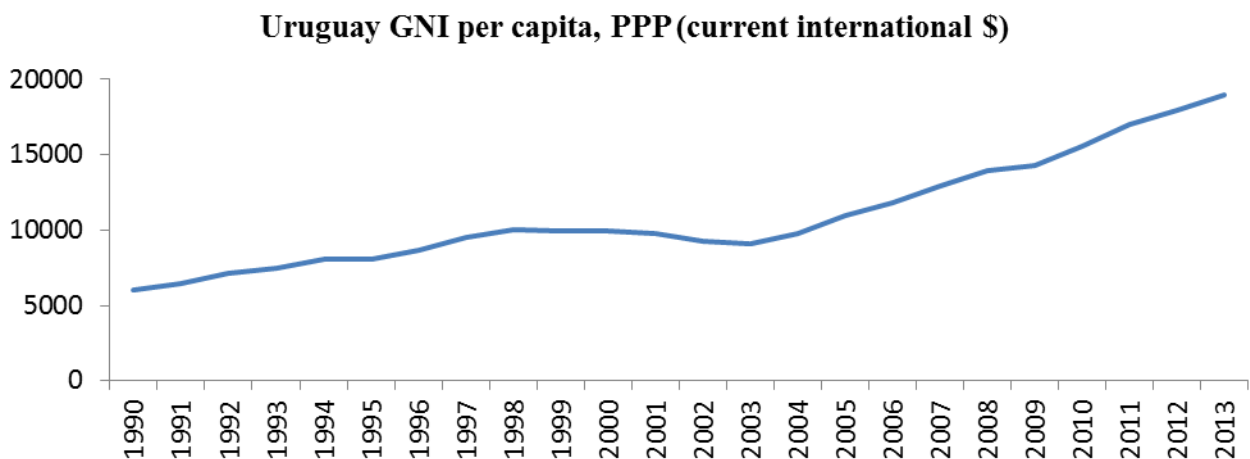


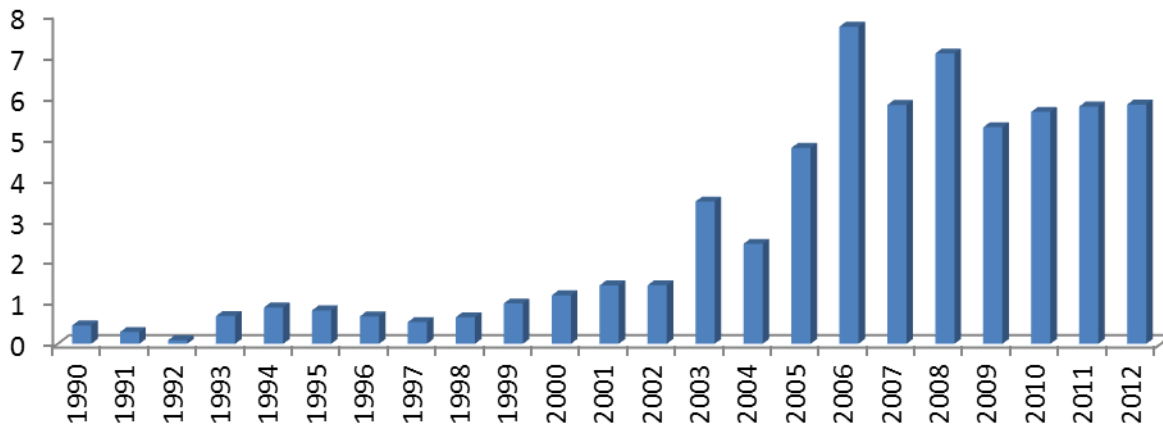
Figure 3. GNI per capita in Uruguay

Source: World Bank (2014b)

First of all, it is critical to study the history of institutions in Uruguay. The republic has had the longest democratic history of any Latin American country. In the 20th century, the country experienced only two institutional breakdowns. In 1933, a civil coup took place that sought rapid re-institutionalization through constitutional and legal reforms. The second crisis, in 1973-1984, led to a military dictatorship similar to other Latin American juntas. The period of military dictatorship was the only time in the 20th century when government in Uruguay was not elected. These facts demonstrate the country's remarkable political development within the regional context. Fleitas et al (2011) argued that quality of institutions has determined the long-term success of economic development of Uruguay, compared with other Latin American countries. They also have noted that the institutional quality influences aggregate economic performance through the accumulation of capital. In the long

run, the Uruguayan political system has demonstrated a level of political stability and continuity that makes it stand out in the regional context. Hence, political stability and democratic culture in Uruguay produced a set of efficient and inclusive institutions that supported the economic growth in the country.

**Uruguay, Foreign direct investment, net inflows (% of GDP)**



**Figure 4. FDI in Uruguay**

Source: World Bank 2014a

Second, it is essential to study the industrial policies that Uruguay government has introduced to escape the middle income trap. In 2002 Uruguay faced a deep financial crisis that resulted in the slowdown of the real economy sector. In October 2004 the coalition of leftist parties came to power under the slogan of “Uruguay Productivo” aiming at producing a new set of industrial policies. It continued on the reforms introduced in 1990s in the area of investment attraction, establishing the supportive environment for the innovation cluster and introducing the Directives for Industrial Development (Barrios et al, 2010). The key factors of the new industrial policies were macroeconomic stability and microeconomic incentives focused at resolving the market and public failures.

At the same time the government developed a complex strategy to introduce a new set of industrial policies aimed at fostering innovation and establishing the technology clusters. New central institutions were created– the Department of Support to the Private sector and the National Agency for Research and Innovation. Industrial and innovation programs were developed and implemented by the agencies in coordination with the private sector through the coordination councils. Most of the innovation programs included the establishment of research networks that would behoove and support the creation of the technological clusters. Importantly, Hausmann et al (2005) stressed that the industrial policy was directed at “self-discovery” (development of new products). As a result, the foreign direct investment increased rapidly from around 0.5-1% of GDP in 1990s up to 6-7% after 2002. The investments were concentrated in new technological and export oriented clusters, such as Zonamerica (the biggest IT and software cluster in South America) (Barrios et al 2010).



Uruguay began a trend of liberalization of its foreign trade along with its integration into the Southern Cone Common Market (Mercosur) in the 1990s. As Mercosur became a free trade area, most Uruguayan exports went to Argentina and to Brazil. As a consequence of the 2002 crisis, the country's foreign commerce policy increasingly diversified the destination of its exports (IMF 2014). The country's foreign trade figures have been growing systematically since then. IMF (2014) indicated that Uruguay has made a remarkable progress in the exports expansion, including expanding market shares. For instance, during 2000 to 2012, Uruguayan exports grew robustly (exports grew on average about 16.8 percent per year during 2005-12, higher than world export growth (9.8%). As a consequence, Uruguay has almost double its share of world goods exports to 0.06 percent in 2012 from about 0.036 in 2000. Furthermore, the share of commodities in the exports of Uruguay has risen. Yet, the quality of Uruguayan commodities has increased, suggesting higher value added. Hence, it is clear that Uruguay leveled up its exports in line with its comparative advantage.

Third, in Uruguay the state acquired a leading role in the economy and took the responsibility for the provision of all kinds of public services. After the 2002 financial crisis, Uruguay faced its highest levels of fiscal deficit and debts in its history. Despite that the Vázquez administration's economic team managed to decrease the fiscal deficit to low levels while increasing public expenditures, especially in education, health and the support of the poorest groups. Bucheli et al (2013) find that social policies in Uruguay have achieved a reduction in inequality and poverty with social spending being equivalent to 21.1% of GDP in 2009. The Economic Commission for Latin America and the Caribbean (Comisión Económica para América Latina y el Caribe, CEPAL) reported a 6.5% poverty rate in Uruguay for 2011, the lowest rate in the region, and in terms of income distribution, a Gini index of 0.402, the second lowest (Bucheli 2013). In addition, the World Bank Development Indicators establish that in Uruguay, just 1.2% of the population lives with less than \$2 a day (World Bank 2014).

The remarkable economic development of Uruguay highlights the importance of inclusive institutions, political stability and the social policies. In reference to the industrial policy it also confirms that the foreign direct investment attraction and the growth of exports are necessary factors for long-term sustainable growth. However, state intervention in the economy should focus at solving real market failures in collaboration with the private sector. This was one of the essential elements of the industrial policy in Uruguay that allowed the country to achieve high levels of growth in 2000s.

## Conclusion

This paper studies the phenomenon of the middle-class from the perspective of Malaysia and Uruguay. The former country exemplifies the case of a country stuck in the middle-income trap: it has been in this status for 42 years. The latter country has been in the middle-income status for x years and thus was also considered to be in the middle-income trap. However, in 2013 it finally managed to escape from the trap.

Studying the reasons why Malaysia failed at graduating into high-income status it was found that three reasons contributed: ineffective government policies in carrying industrialisation policies, imposition of limits on economic growth by the New Economic Policy and inability of the Malaysian economy to escape from harmful effects of economic recessions. The first reason represents the failures of the government to create strong and competitive manufacturing sector well connected through various linkages with the rest of the economy. This was due to government providing high protection to infant industries and failure to start producing sophisticated products because of underdeveloped human resources. The second reason represents the problem of the New Economic Policy putting wealth redistribution ahead of wealth creation policies. This contributed to institutionalising discrimination against sizeable groups of population, which obviously had harmful effects on economic activity. Finally, the third reason represents the harmful effects of three episodes of economic recession (1980-1985, 1997 and 2008) on the Malaysian economy. This stems from the effects of the two aforementioned reasons and from the failure of the government to develop the human capital in line with the developments in the industrial sector, which resulted in low labour productivity.

Uruguay managed to become one of the first Latin American countries to escape the middle income trap despite the severe financial crisis that hit the country in 2002. The country tripled its gross national income per capita in 23 years, attracted foreign investments, created technological clusters and supported the social policies. The critical factor that underlined the country's remarkable development was the quality of institutions. Uruguay has preserved its democratic traditions combined with the political stability that resulted in inclusive and efficient institutions. Hence, the inclusive institutions allowed the country to recover faster from the crisis in 2002; the new government was elected in 2004 to introduce a set of smart industrial policies that were helping rather than hampering the domestic industries. Moreover, the government maintained and expanded the social programs, including investments in education, health etc. As a result, the Uruguayan exports widened and increased in the world, helped by the country's membership in Mercosur.

The comparison of the two countries under consideration reveals that the critical component necessary to escape from the middle-income trap is effective institutions. In particular this means the need for effective and small government. Malaysia failed in this area because it was too actively involved in the industrialisation process

picking winners and caring too much about interracial wealth distribution. In contrast, Uruguay developed democratic institutions that were focused on providing sufficient conditions for private sector to thrive.

This is, however, not to say that the government in Malaysia was totally ineffective. Since its independence Malaysia achieved one of the most remarkable economic transitions in the XX century. The government was able to transform its structure of the economy building the new industrial sector and it also managed to reduce poverty from the initial rate of 43% to 5%. However, as the economy matured, the government failed to limit its role and allow for pure competition. In fact, when in the beginning of the 1990s Malaysia made steps in the direction of limiting the public sector and shifting economic powers to the private sector, it achieved one of the highest growth rates in Asia.

Based on what was said above, therefore, the following recommendations could be made regarding policies to tackle the problem of the middle-income trap. Firstly, it is essential to develop industry sector based on the production of highly sophisticated products. This is because production of sophisticated goods creates better linkages with other sectors in the economy. Secondly, it is essential to develop human resources as the process of industrialisation proceeds. This will increase the labour productivity and, thus, help to achieve the first objective. Finally, once the industrial sector matures, it is important for the private sector to expand into the areas previously occupied by the public sector. At the end of the day the business of the government is not to do business, it is to govern! Compliance with all these recommendations, therefore, should help countries to avoid or escape from the middle-income trap.

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