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This issue in brief:

Impact of Government Intervention in the Car Market on Inequality in Singapore

Car prices in Singapore are notorious for being among the highest in the world. In this article, Tay Qi Hang discusses how policies regarding car ownership have led to an increase in inequality in Singapore and also proffers alternative policies which the government should take to address this issue.

European Monetary Union as a Common Currency Area

The introduction of the Euro in 1999 was a move to build a common market for trade in the European economy. In this article, Ng Bo Lin discusses the sustainability of the Euro, a concern which is especially relevant in the backdrop of the recent Eurozone crisis.

The Growth of the Indian Pharmaceutical Industry

Join Shrey Bidasaria as he discusses the reasons behind a predicted growth in the Indian pharmaceutical industry and the hurdles which the industry would have to overcome.

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IMPACT OF GOVERNMENT INTERVENTION IN THE CAR MARKET ON INEQUALITY IN SINGAPORE

By Tay Qi Hang

Introduction

Since gaining its independence 50 years ago, Singapore has enjoyed spectacular economic success unmatched by any other economy in the region. With a GDP per capita of over $51000 as of 2013 (World Bank, 2015), Singapore has become renowned for being one of the wealthiest nations in the world. The median household income in Singapore has also grown rapidly, from $3638 in 2000 to $5000 in 2010 (Figure 1). However, income inequality in Singapore has also been rising, with the nation's Gini coefficient increasing from 0.460 in 2002 to 0.478 in 2012 (Figure 2). This has led to rumblings of discontent in Singapore, especially as residents find themselves unable to cope with the rising cost of living in the country. This is due in no small part to the cost of owning a car; a prospect which is becoming increasingly distant for most due to government intervention in the market. In fact, the exorbitant cost of purchasing a car in Singapore has caused amazement among residents of other nations around the world (The Straits Times, 2013). This article discusses how the government's policies regarding car ownership has led to an increase in inequality in Singapore and also proffers alternative policies which the government should take to address this issue.

Table 1 Monthly Household Income from Work Among Resident Households

Year	Median Household Income			Average Household Income		
	Dollar	Nominal Change (%)	Real Change (%)	Dollar	Nominal Change (%)	Real Change (%)
2000	3,638	3.9	2.6	4,988	5.7	4.2
2001	3,860	6.1	5.0	5,338	7.0	5.9
2002	3,628	-6.0	-5.6	5,069	-5.0	-4.7
2003	3,601	-0.7	-1.2	5,075	0.1	-0.4
2004	3,689	2.4	0.8	5,194	2.3	0.7
2005	3,860	4.6	4.1	5,447	4.9	4.4
2006	4,000	3.6	2.6	5,715	4.9	3.9
2007	4,375	9.4	7.1	6,295	10.1	7.9
2008	4,946	13.1	6.0	7,086	12.6	5.6
2009	4,850	-1.9	-2.5	6,826	-3.7	-4.2
2010	5,000	3.1	0.3	7,214	5.7	2.8

[1] Household income from work refers to the sum of income received by all working members of the household from employment and business but excludes the income of maids.

Figure 1: Monthly Household Income from Work among Resident Households in Singapore
Source: Department of Statistics Singapore

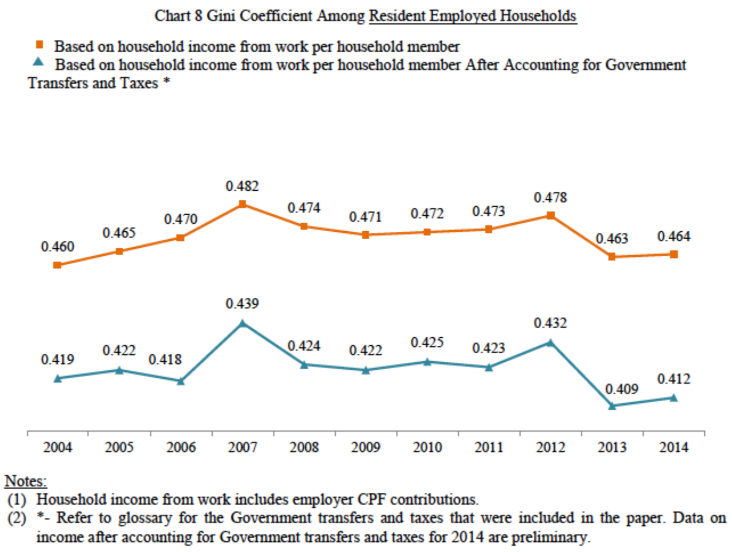

Figure 2: Gini coefficient among resident employed households in Singapore
Data source: Department of Statistics Singapore

Current Policies

Singapore is one of the most densely populated and urbanised cities in the world, with a population density of over 7000 people per square kilometre (World Bank, 2015). Due to this, the government has enacted numerous policies to control the nation's vehicle growth rate. There have been two major components to this: the Additional Registration Fee (ARF) and the Certificate of Entitlement (COE).

The ARF was introduced in Singapore in 1968 as a means for the government to reduce the nation's rapid vehicle growth rate. While initially set at 15 percent of a car's Open Market Value (OMV), this percentage has risen over the years to 175 percent in 1983 (Woo, 2013). In 2013, a tiered ARF rate was introduced, with new rates ranging from 100 percent to 180 percent, depending on the car's OMV (Xiang, 2014).

The COE was introduced by the Singapore government in 1990 as a product of the Vehicle Quota System (VQS) designed to limit the country's vehicle growth rate. Under this system, prospective car owners are required to bid for a certificate which allows them to own a car for ten years, after which they have the option of either scrapping their vehicle or renewing their COE for another ten years for a hefty fee. As the price of a new COE depends heavily on the quota released by the government each month, prices can vary greatly with each bidding round.

Effects

The combination of the ARF and COE has caused car prices in Singapore to be among the highest in the world (Willoughby, 2001). In fact, it is not uncommon for a car in Singapore to be priced at more than 300% of its cost in another country. A case in point would be the Mazda 6 saloon, a common family car. While this vehicle costs just S$42317 in the UK (after accounting for exchange rate differences), it costs a staggering S$130988 in Singapore

(OneMotoring, 2015). Due to this, a car in Singapore has become regarded as a luxury good which is attainable only by the wealthy and the upper-middle class (Woo, 2013).

Since 1990, Singapore's government has relied heavily on the Certificate of Entitlement (COE) system to control the country's vehicle growth rate. However, this system is highly regressive due to the fact that the COE price is a far larger proportion of a small car's total price as compared to that of a luxury car. To illustrate this point, the COE makes up 58% of the total price of a Kia Rio, a popular family sedan, as compared to 26% of that of a BMW 5 Series (OneMotoring, 2015). This is especially true in recent years, where the COE has risen from slightly over $10000 in February 2007 to over $70000 in February 2014 (Land Transport Authority (LTA), 2014). This demonstrates that the COE system is highly regressive as buyers of small cars, who are likely to be members of the middle-class, are more heavily penalised as compared to buyers of luxury cars. Furthermore, both the wealthy and the middle-income pay the same amount for their COEs no matter how much they earn. This skews the market heavily in favour of the rich as they will always be able to push prices up due to their greater earning power and disposable income.

As a result, the Singapore car market has evolved into one where the wealthy are able to consistently outbid other residents for COEs to purchase cars. While the wealthy elite are easily able to afford COEs for each of their multiple cars, middle-class families are forced to either fork out the high price or live without a car. This has led to a massive increase in the sales of luxury vehicles in Singapore, which has further developed into a majority of vehicles sold in Singapore are luxury cars. In fact, in the year 2013, Mercedes-Benz and BMW were the two best-selling car makes in the nation (LTA, 2014). Perhaps more shockingly, Porsche, an ultra-luxury car make, sold more units in that year than Mitsubishi, a once-popular Japanese family car manufacturer (LTA, 2014). Such a situation is perhaps unique only to Singapore and demonstrates the extent of the perverseness of the current vehicle allocation system.

Implications

It is clear that the government's intervention in the car market has led to a phenomenon where only those with high disposable incomes are able to afford to purchase them. This is a concern as it may lead to stratification between those who own cars and those who do not. Owning a car is often seen as a necessity by the wealthy and the upper-middle class due to convenience. This convenience affords them advantages and benefits which those who do not own one may be unable to enjoy. In fact, participation in some programmes catered to the elite is only possible with access to a vehicle. A case in point is the Gifted Education Programme (GEP), which is designed with the assumption that parents are able to chauffeur their children about by car, and where the lack of access to one is likely to inconvenience the student considerably (Barr & Skrbis, 2008). This illustrates how the government's intervention in the car market is likely to further stratify society and lead to a class divide.

Alternative Measures

Having expounded the link between government intervention in the car market and economic stratification in Singapore, this article proceeds by suggesting different measures which the government should consider implementing to control Singapore's vehicle population. The first would be transforming the COE system into a needs-based one. This is imperative as many households which need cars, such as those with elderly or handicapped members, are competing for the very same COEs which the top 1% of income earners are also bidding for. Under this system, prospective buyers from households which already own a car would compete for COEs in a different category with a more limited quota. This is likely to lead to a higher price for COEs in this special category. In addition, households including members with demonstrated needs would be given subsidies to own a vehicle. This would create a more equitable market where resources are allocated based on need, not on ability to pay.

Alternatively, cars could be classified into different COE categories based on their Open Market Value (OMV). The OMV of a car refers to the price paid to the overseas exporting firm and includes purchase price, freight, insurance, and import costs (OneMotoring, 2015). The government should then allocate a fixed number of COEs for each category. This would create a market where the wealthy would be competing among themselves for ownership of luxury cars, the upper-middle-class would be competing among their peers for mid-range cars, and even the middle and working classes would stand a fair chance to compete for cheaper cars.

Another policy which the government could adopt would be to modify the COE auction into a uniform-percentage system. Under this system, bids would be a percentage of each individual car's price and successful bidders would pay the lowest percentage. Although successful bidders would be paying different dollar amounts, the COE premium paid by each buyer would be the same proportion of the value of each individual car. This would thus be a more progressive and equitable system which the government should consider adopting.

Conclusion

Inequality in Singapore is a problem which has worsened significantly in the past decade. With its competitive tax rates, modern infrastructure and strategic location, Singapore has become a top destination for wealthy foreigners to work, invest, and settle down in. The opening of the Integrated Resorts in 2010 and the subsequent inflow of foreign capital has further exacerbated this issue. While Singapore must always remain open to capital inflow, it is crucial not to use this as an excuse to allow inequality to fester. Early signs of discontent have already been observed, from public outrage at British expatriate Anton Casey's derogatory comments towards 'poor' Singaporeans to widespread fury towards a wealthy Chinese expatriate who caused two deaths by crashing his Ferrari into a taxi. As Singapore strives to be a welcoming land of opportunity for all, it must not neglect the middle-class which forms the bulk of its population. Hence, it is important for the government to take steps to address this growing sense of inequality by revamping its policies in the car market. Reforming these policies is no guarantee that this problem would be solved, or even ameliorated. But it does proffer the hope that, with this fairer approach, Singapore will be able to develop into a more equitable and inclusive nation, one which all its citizens can be proud to live in and call home.

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EUROPEAN MONETARY UNION AS A COMMON CURRENCY AREA

By Ng Bo Lin

Introduction

In 1999, countries in the European Union decided to take a step further, that is, to agree upon a single currency, the Euro. They believed that with the Euro, this results in the removal of exchange rate fluctuations as well as exchange rate hedging so that firms will enjoy higher profit margin through these cost savings. In addition, politicians were hoping that the Euro will improve the political and economic profile of Europe, essentially making it the United States of Europe.

However, the recent economic crisis had posed a huge challenge to the European Monetary Union (EMU). Can countries with such diverging fiscal policies like Greece and Germany exist together in this economic marriage? Is the Euro sustainable, given the stark differences between the macroeconomic fundamentals within the member countries themselves?

Working Towards a Common Currency Area

In a paper written by Martin Feldstein[1] (2011), he mentions that the monetary policy set by the European Central Bank (ECB) will be applied wholly across the EMU. This also implies that each country within the EMU will face the same exchange rates. In essence, these countries have no autonomy over their monetary policy, so that they are unable use monetary policy to spur their economy.

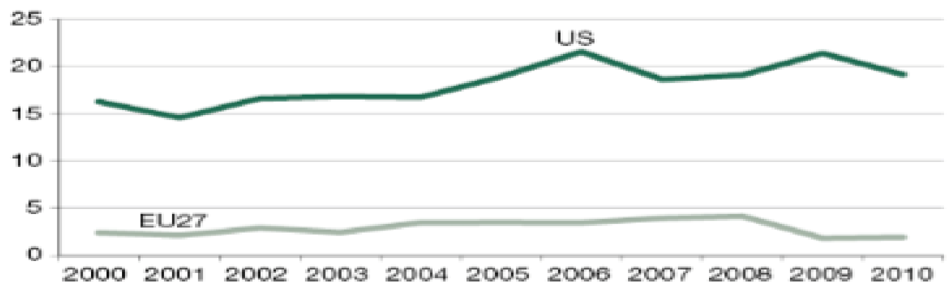
This may not have been a problem if macroeconomic fundamentals of the members within the EMU were similar, to the extent that monetary policy can provide a helping hand to all members in the event of an adverse shock. An expected shock to the aggregate demand of these countries will result in lower prices and lower demand for goods. The ECB can then conduct Open Market Operations (OMOs) to buy bonds to reduce interest rates, which will then spur the economy. In this case, monetary policy works well in the face of symmetric shocks. However, this was not the case for the EMU, due to their differences in comparative advantages as well as their legal systems.

Historically, Mundell[2] (1961), Friedman[3](1997) and Feldstein (2011) pointed out that a floating exchange rate has been used as a tool which countries could use to respond to volatility in the global economy. For example, when the demand for a currency weakens due to its macroeconomic fundamentals, capital outflows put downward pressure on the currency, leading to a devaluation. In this regard, the exchange rate brings the country's Balance of Payments (BOP) back to equilibrium whenever there are any shocks to the system.

When a country faces an exogenous shock to aggregate demand, firms may wish to lay off workers, or cut wages in order to cut costs. With lower wages and higher unemployment, high factor mobility can play a huge part in restoring equilibrium to the system. Workers from the affected country may opt to migrate to other countries with better opportunities, reducing labour supply leading to an increase in wages. In the long term, we should find that wages over the same industry across countries within the common currency area to be similar.

However, the presence of strong labour unions in the EU have made it hard for firms to lay off workers during bad times, which resulted in certain countries going through longer recessions than they absolutely have to in the event where high factor mobility was achieved. Jager and Haftner[4](2013) found that the gross migration rate between 2000 and 2010 in the EU27 was about 2%, as compared to the United States' 18%. They also note that the geographical mobility was not just low across countries, but within countries, which can be attributed to the strengths of the labour unions. In OECD's 2013 Employment Database, when we compare the EU to the USA, EU workers tend to enjoy more benefits, extending from the length of the notice period to the severance pay. These benefits do come at a cost since firms will find it costly to lay off unproductive workers in the short term.

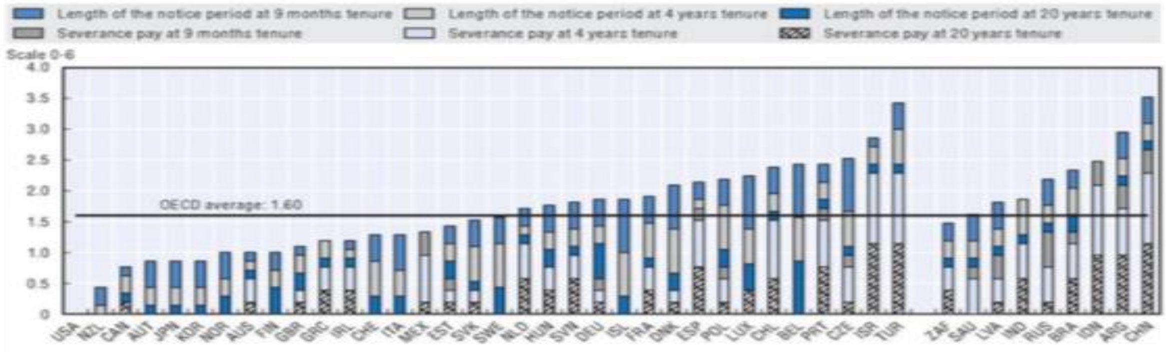
Gross migration rates in the EU27 and US, 2000-2010



Note: Gross migration (per thousand residents) is calculated as the sum of in and out migration in a region/country changing place of residence within a year.

Source: EU27 data from Eurostat: Population and Social Conditions Statistics, 2013; US data from US Census Bureau: Current Population Survey: Geographical Mobility 2001-2011, 2013.

Figure 2.1. **Protection of permanent workers against individual dismissal: Notice and severance pay for no-fault individual dismissal**



Note: Data refer to 2013 for OECD countries and Latvia, 2012 for other countries. The figure presents the contribution of different subcomponents to the indicator for mandatory notice periods and severance pay. The height of the bar represents the value of the indicator for notice and severance pay.
Source: OECD Employment Protection Database, 2013 update, http://dx.doi.org/10.1787/lfs-epl-data-en.

Another criterion which the EMU did not have was the establishment of a fiscal union which oversees the fiscal policies of its members. In the United States, although different states have their own fiscal policies, these policies are very similar to the national policy (Friedman, 1997). Since countries have different needs, fiscal policies have to be tailored by the fiscal union to ensure that the EU is working towards its national policy. And this was, perhaps, the reason that sparked the financial crisis. It stemmed from the fact that the markets were uncertain whether Greece was able to repay its huge structural deficit after the Greek government drastically revised its budget deficit. After investors were certain that Greece was unable to service its debt, they looked out for countries with similar macroeconomic fundamentals as Greece, such as Spain and Italy where governments were spending beyond their own means.

Saving the European Monetary Union

Indeed, it is heart-warming to witness the changes undertaken after the European crisis. Trade unions across Europe are weakening (Bernaciak et al[5], 2014), and talks are currently underway to establish a fiscal union within the EU. Although legacies of the crisis lingers on, current large-scale asset purchases undertaken by the ECB have helped to lower borrowing costs across the region for consumers and firms, spurring real economic activity.

Moving on, it is imperative that countries who are performing better economically should provide fiscal transfers to those that are struggling. In a common currency area, there are bound to be “winners” and “losers”. It is in the interests of the “winners” to offer aid to the “losers” such that all will be better off in the long run. For this arrangement to work, a fiscal union has to be established.

Countries in the Eurozone has traded 8 – 23% more with each other with the emergence of the Euro (Rose[6], 2008), due to savings from transaction costs and exchange rate stability. In addition, the Euro has strengthened political ties and will continue to do so in the future, paving the way for monetary unity.

Saving the European

Going back to our question: Has the European Monetary Union fulfilled the criterions for a common currency area? Only for a few countries. Countries such as Austria, Belgium and Luxembourg, prior to the formulation of the common currency area, were already pegging their currency to the Deutsch Mark. As for the other countries, however, they are only starting to work towards the fulfilment of these conditions. The weakening of trade unions across the EU as a whole should improve labour mobility, while talks of the establishment of a fiscal union will help to ensure that the fiscal policies of the EU members are aligned with the common goal.

In addition, the ECB is working towards a “Deeper and Fairer Economy and Monetary Union” (ECB[7], 2015) in terms of strengthening political, fiscal, economic and financial ties within its members. The Fiscal Union will work with the national fiscal councils to ensure that fiscal objectives are made, while the new Banking Union will ensure that the deposits of depositors are ensured, as well as the mitigation of financial risks build-up. The establishments of these unions will help to achieve a more vibrant economy with stronger macroeconomic fundamentals reducing financial instability within the common currency area.

Recently, the ECB looks to fine-tune banking rules across member countries to increase banks' confidence about cross-border lending (ECB[8], 2015). Through harmonising banking rules, banks will definitely be more willing to engage in improve cross-border lending, leading to improvement in economic activity across the region. In addition, this results in a more efficient allocation of credit, as firms are not constrained by lending rules set in their own countries.

Recent large-scale asset purchases undertaken by the ECB has provided breathing space for countries to implement much needed reforms. Although most reforms are country-specific, objectives are pretty much the same, that is, to make the EMU a much more competitive place for businesses investment and to improve factor mobility not just within but also across countries. Banks with legacy debts are also in dire need of reform to handle their unsustainable levels of nonperforming loans, which can prove to be an impediment to business investment. (IMF[9], 2015). Ultimately, only the success of these structural reforms, in conjunction with the ECB’s quantitative easing, can ensure the long term viability of the EMU.

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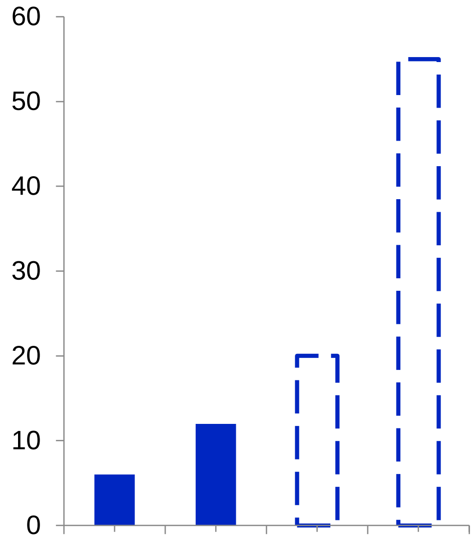
THE GROWTH OF THE INDIAN PHARMACEUTICAL INDUSTRY

By Shrey Bidasaria

The Chinese stock market crash in August 2015 caused a huge ripple effect in India, with 7 lakh crores of investors' wealth being wiped off from the Indian stock market[1]. This loss in investor confidence could be seen all over the world and was homogeneous across almost all industries. However, while the world faces economic slowdown, the Indian pharmaceutical industry seems poised for growth.

The Indian pharmaceutical industry is estimated to reach $55bn in revenue by 2020[2], from its value of $16bn in 2014, growing with a CAGR of 22%. This is largely due to the industry's generic drugs exports. Indian firms are positioning themselves to exploit patent expiries and untapped markets. In addition, they are trying to explore new and complex drugs. However, price controls and tightening of foreign regulations might hinder this growth.

Figure 1: Sector Growth

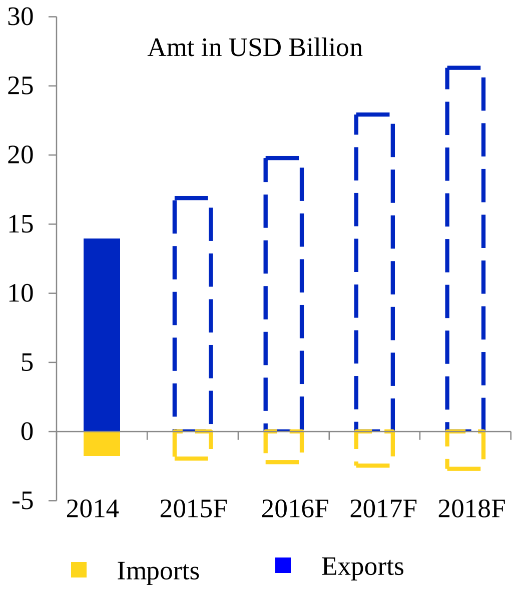


Source: McKinsey, IBEF

Generic Leaders in Exports

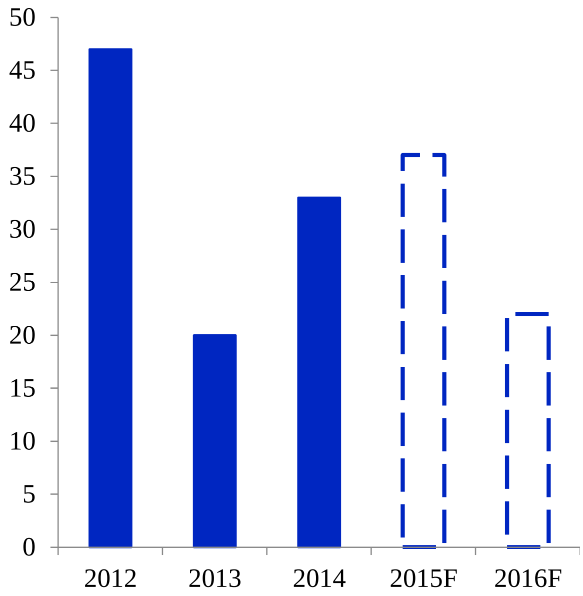
Indian pharmaceutical companies possess not only a domestic stronghold, but also a respectable global footprint, boasting of exports totalling $14bn in 2014, with the US being the largest foreign market for generic drugs[3] (Figure 2). The rising cost of healthcare in foreign countries drives the use of generic drugs. Being chemical copycats of patented ones, generic drugs are much lower in cost due to the forgone R&D, marketing and promotion costs associated with making a drug from scratch. In addition, the cheap production costs in India gives Indian players an edge over their competition. The cost of a clinical trial is one-tenth and R&D cost is one-eighth as compared to the US. Moreover, a pool of talented professionals and cheap labour makes India a lucrative manufacturing spot for the pharmaceutical industry. The potential in the generics market is due to a number of foreign companies falling off the 'patent cliff', as $70bn worth of patent drugs will go off patent in US over the next three years (Figure 3). With 546 US Food and Drug Administration (FDA) approved company sites, Indian firms will be able to capitalize on this quickly.

Figure 2: Imports & Exports Forecast



Source: BMI

Figure 3: Value of Drugs going off patent



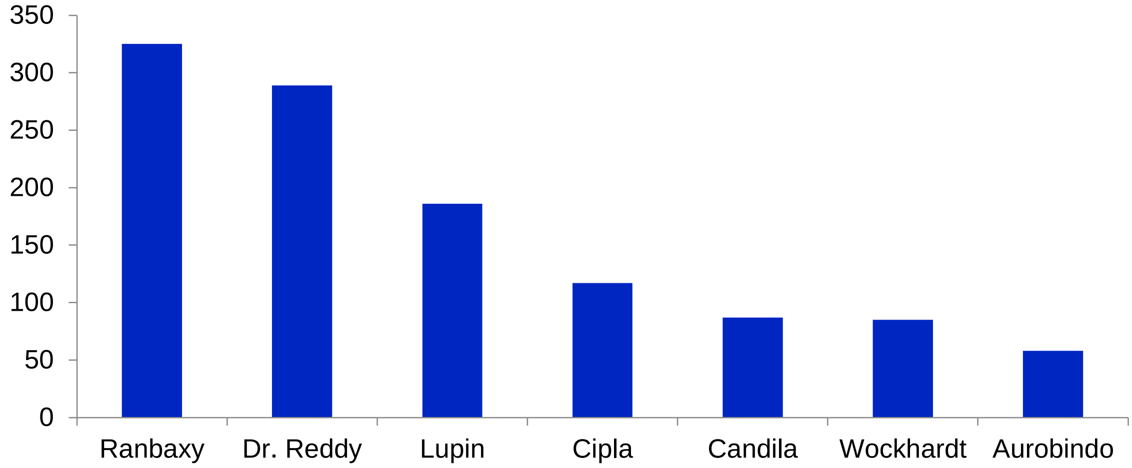
Source: IMS Health

Potential Impact on the World

The Patent (Amendment) Act in 2005 gave rights to new drugs for 20 years. Hence, many big companies are focusing more on R&D to make new drugs, having spent between $58 – 325mn in FY15[4] (Figure 4). Since the cost of production in India is very low as compared to other nations, companies have an even greater incentive to undertake R&D expenditure. Smaller firms who cannot afford this are exploring more complex generics to diversify their products. By the time these products are in the market, it is likely that there will be sufficient demand for them. A combination of better healthcare in rural areas, increase in chronic diseases and increase in India's ageing population, with 98mn people in India expected to be above 65 years of age by 2020, will increase the demand for drugs significantly[5].

Aside from the growth drivers mentioned, government measures such as 100% Foreign Direct Investment (FDI), a rise in healthcare spending and infrastructure expansion will bolster the industry's growth. Firstly, the government has allowed 100% FDI through the automatic route in the pharmaceutical sector. With the industry being open to more investment opportunities, this profitability is expected to rise. Secondly, the government has unveiled its India Pharma Vision 2020. This seeks to reduce the approval time for production facilities and spur an increase in investment in the pharmaceutical sector.

Figure 4: Value of R&D Investment in 2015 (Amt in USD millions)



Source: ICRA

Problems

Despite the presence of these growth drivers, there remains a few major hurdles for the industry to overcome. One of these hurdles would be the increasing regulation in FDA approvals leading to more product recalls and bans. Large companies such as Sun Pharma and Ipca Labs are still working towards attaining full regulatory compliance. Recently, EU banned 700 Indian drugs for failing to meet the trial requirements[6]. Additionally, the FDA has been imposing more checks on Indian companies, in the form of facility visits and dictating production standards. Compliance with these regulations is a very time consuming process. As such, this delays the release of the drugs in USA, thereby affecting revenue.

Stringent price control is another potential hurdle to overcome. The Indian government intervenes to reduce the price of drugs or issue compulsory licenses to ensure affordable healthcare. In May 2013, the government released a new Drug Price Control Order that aimed to reduce the price of 384 essential medicines. Similarly, in July 2014, the National Pharma Pricing Authority reduced the prices of widely used anti-diabetic drugs by 35%. Such measures have the effect of eroding profits as well as hampering innovation. As a result, the number of drugs launched in the country declined from 270 in 2008 to 56 in 2014[7].

In conclusion, rising exports, increasing consolidation and innovation and government support are the main drivers which will bolster the growth of the Indian pharmaceutical industry. While cheap costs of production and the 'patent cliff' phenomena show promise for generic exports, Indian companies are trying to enter the market for new drugs. This strategy of capitalizing on all fronts of the industry will not only improve profitability but also negate the effects of government regulations and FDA checks. Thus, the Indian pharmaceutical industry is likely to become one of the leading industries of the Indian economy in the years to come.

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