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A note from the Editor-in-Chief

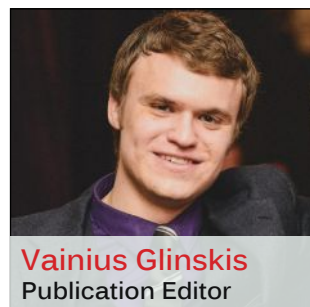
Welcome to the 7th edition of Insight. It has been an exciting few months with a complete change of staff and many new features including the CRCC Asia Writing Prize and the writer's section on our website.

Economics is the study of Humans and how we produce, allocate and manage scarce resources. However, the Human aspect is frequently buried in a barrage of esoteric, seemingly irrelevant terminology and ideas. This edition aims to reverse this trend and fully demonstrate the Human impact of Economic concepts.

I hope you enjoy this publication and that it inspires you to become part of the Insight team next semester.



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Head of Production



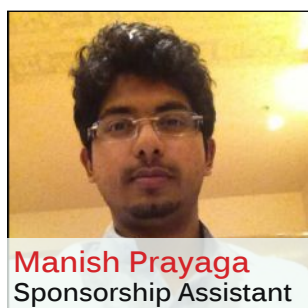
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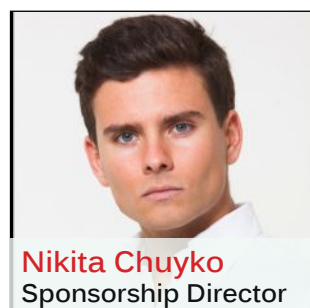
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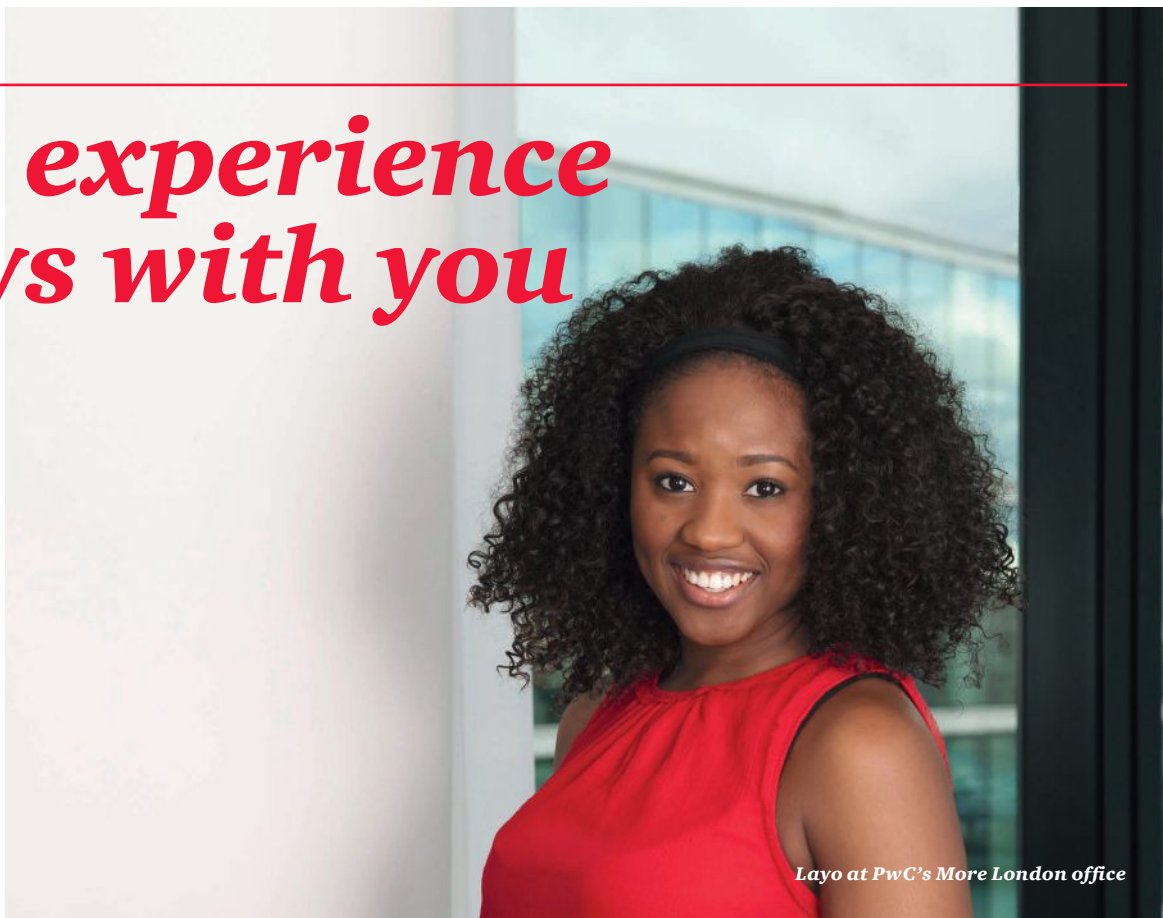
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Time for Change: Redirecting the Chinese Dragon

Kenzo Muller analyses the necessary re-balancing in the Middle Kingdom

IN THE WINTER of 1978, China's top decision-making figures convened to discuss possible reform after emerging from a decade of social unrest and political restructuring.

The Third Plenum of the 11th CPC Central Committee emphasised economic policy over ideological adherence, which was taken to the extremes during the Cultural Revolution, and confirmed Deng Xiaoping as de facto leader of the Communist Party. Known for his pragmatic approach, Deng Xiaoping enacted a series of controversial reforms based on capitalist principles such as private ownership, investment and trade.

Waking the sleeping giant

The opening up of China to the world economy set the country's new development path on foreign investment. Over the next three decades, the country underwent economic and social metamorphosis from a relatively isolated command economy to the world's largest manufacturer and exporter, raising millions out of poverty in the process.

In November of 2013, the Party is scheduled to hold another third plenum, this time of the 18th Communist Party of China (CPC) Central Committee, under the leadership of the General Secretary incumbent Xi Jinping. Topics of discussion range from land reform to the role of state-owned enterprises to environmental issues.

The plenum suggests China is reaching another crossroads in its road of economic growth. While Xi Jinping is unlikely to be as radical a game changer as Deng Xiaoping, his outlook is still reformist within the limits of the

current economic system.

The 18th Central Committee recognises that many of the reforms instituted in the Deng era are unsustainable and perpetuating imbalances in the Chinese socioeconomic structure. Widening gaps between consumption and investment, exports and imports, as well as geographic and demographic factors, top the agenda of the plenum.

Old habits die hard

In 2013, investment continues to play an integral part in the Chinese economy, accounting for over half of GDP growth. Yet recent economic data show a marked slowdown in growth. Quarterly growth 'rebounded' to 7.8% in the 3rd quarter, the highest it has been for 10 consecutive quarters, but still comparatively low to the 'double-digit rates' enjoyed during the 1990s.

This can be understood intuitively; an economy cannot spend indefinitely on investment projects such as highways, airports and factories, as its returns will diminish over time and cease to remain profitable. Yu Yongding, director at the Chinese Academy of Social Sciences provides a telling example of overcapacity in the steelmaking industry, of which only 70% of its capital was utilized in 2012, generated a profit rate of 0.04% that same year. The profit reaped from two tons of steel would not be enough to buy a Cadbury's Wispa.

Underutilization of capital and general inefficiency is a recurring theme of government designated 'strategic industries' such as the steelmaking industry or telecommunications industry. While the role of state-owned enterprises was heavily reduced by privatization reforms



Zhou Ding

enacted by Deng Xiaoping, SOEs have seen a recent resurgence since the government provided a stimulus package to safeguard these industries from the effects of the financial crisis.

Global expertise

Exports are also a shaky foundation to base the world's second largest economy on, as it is dependent on global demand and an undervalued currency. In fact, recent exports have been fluctuating precisely because of these two factors. The Chinese renminbi has appreciated over 30% in value against the dollar since 2005, affecting the competitiveness of Chinese exports as they become relatively expensive to global importers.

With the Eurozone still stuck in its debt crisis and the U.S. only beginning to recover from recession, global demand for imported goods remains unstable at a lower base level, fluctuating according to how these major trading partners assess their economic outlooks. China's dependence on foreign demand is exemplified by the solar panel industry, where 88% of all solar panels produced in 2011 were shipped overseas. This summer, Chinese authorities were accused by the E.U. of predatory pricing of solar panels and encouraging dumping practices in the European market.

The dispute remains unresolved with both parties threatening to raise tariffs on their respective imports of solar panels and wine. While the strict definition of dumping is selling below cost and thus making a loss on each unit

sold, it is more probable that Chinese manufacturers were still able to turn a profit at very low prices, which were sustained by government subsidies. The prevalence of government subsidies and state-owned enterprises in the export industry links the imbalance of exports to the issue of overcapacity at home.

Summarised in one word, the proposed remedy to the variety of imbalances China faces today is rebalancing. In order for China to continue growing, albeit at a slower rate, it must counterbalance excessive investment with higher household consumption. The logic to this argument is that domestic consumption will avert a 'hard landing' by keeping the economy afloat, while reining in on unsustainable investment projects in industries that have reached their productive capacity. With higher demand for goods and services at home, exporters will turn to domestic markets over foreign markets experiencing diminished demand.

Taking action

The Xi administration has already taken tentative steps in prioritizing household consumption over investment. It pledges to raise dividend pay-outs made by state-owned enterprises and transfer the

raised funds to social security programs as a direct channel of redistributing income from firms to consumers. The government is considering reducing or fully cancelling subsidies to state-owned enterprises in the energy sector. This would liberalise the market by allowing smaller suppliers to compete as well as reduce the implicit wealth transfer from household to firm entailed in subsidies. The Ministry of Finance also proposes to raise funds for welfare purposes through a carbon tax to be enacted within the next two years.

While these policies are taking steps in the right direction, the Xi administration should not overlook the systematic predominance of state-owned enterprises in the economy. Relatively low bank earnings suggest that the banking sector continues to provide preferential treatment to SOEs through low-interest loans. In the third quarter, net interest income only grew by 5% at the Industrial and Commercial Bank of China (ICBC), China's largest bank by assets, which is less than a third of last year's growth rate. The banking sector illuminates the current economic system's continued support for SOEs, which is sustained at the expense of consumers who are subject to higher interest on

their loans. One of the main challenges faced by the Xi administration will be to make a decisive break from the SOE lobby and reform the banking sector.

There is no doubt that China is reaching a pivotal point on its path of economic growth. The Deng era reforms were initially very successful in ushering China's transition to a mixed market economy. However, China's rapid economic rise driven by foreign investment and exports imposed implications on its socioeconomic structure by perpetuating imbalances. In other aspects of the economy, the Deng era reforms were reversed after the financial crisis and allowed for the survival of inefficient institutions such as the state-owned enterprise. The Xi administration has already taken commendable steps in leading the transition from an investment driven economy to one of more sustainable growth based on household consumption. A truly successful transition akin to that of Deng Xiaoping will depend on the Xi administration's perseverance in pursuing widespread reform, notably to reduce the predominance of state-owned enterprises and placing the consumer at the centre of the economic fabric of China.



New Kid on the Euro Block

Madara Jadviga Rudzite examines the effects and implications of the adoption of the euro in Latvia

BEING FROM A country no one has heard of can be fun. From my experience, people would readily trust me if I said Latvia was a state by Ohio or did not have electricity. For some reason unbeknownst to me, no one seems to believe me when I claim that Latvia has the fastest internet in Europe (number four in the world) or holds the two only gold medals in BMX in the history of Olympics (the discipline was introduced in Beijing 2008). Despite these accomplishments, Latvia remains a mystery for many people living outside of Eastern Europe.

Moving on

The term Eastern Europe, however, has become increasing more irrelevant. The Iron Curtain fell over 20 years ago and any communist heritage has been swept out of everyday life. The most important economic division in Europe currently is between the North and South; hence the PIGS countries (Portugal, Italy, Greece, Spain) and Cyprus. In

2014 this distinction will be confirmed once again by Latvia through its entry into the Euro zone, following Estonia's adoption of the single currency in 2011.

The BIG question asked, of course, is "What will happen?" and truth be told, the question comes 9 years too late. The accession treaties for the 10 countries that joined the EU in 2004 (including Latvia) state the obligation to adopt the Euro. Exactly a year later Latvia joined the ERM - II (European Exchange Rate Mechanism), pegging the national currency "Lats" (LVL) to the Euro at the approximate exchange rate EUR 1 = LVL 0.7. This, not January 2014, was the turning point, and the concept of Impossible Trinity (or Trilemma) tells us why. With a fixed exchange rate and free capital flow, Latvia has no influence whatsoever on its monetary policy.

When the Great Recession struck this small, open economy, and the GDP fell 18% in 2009, the government embraced a tough austerity plan to qualify

for a EUR 7.3 billion rescue package. This resulted in a painful recovery, reflecting the decreasing degree of both monetary and fiscal independence (Troika or European Central Bank, IMF and EU approved the national budget during austerity).

Adopting the euro

Ever since then, the Euro has been present in every household. Families would keep some money in Euros so they would not have to keep converting the currency when Euros were needed. My father even gave me Euros rather than Lats to exchange for pounds when I first moved to Scotland. Calculating price differences from Euro to Lats has been so usual that, in order to get from pounds to Euros, it takes less time for me to go from pounds to Lats to Euros than look up the original pound to euro exchange rate. And I am not the only one - as of September 2013, only 46.16% resident household deposits are in LVL, as are 19.28% government and 1.90% non - resident deposits, while the average overall level of deposits in LVL are 18.96% (all data from Central Bank of Latvia).

Given this, nothing will really change in Latvia next January. Morten Hansen, Head of Economics Department of Stockholm School of Economics in Riga, and an academic authority in Latvia, agrees that "the country is already half way into the Eurozone, and [because of the] many effects [that] have come already via the fixed exchange rate, joining the Eurozone is the last and logical step". He also claims that there will be "a bit more inflow" of foreign capital due to elimination of transaction fees and bigger transparency. Even though capital flows have been positive for the last year, they have decreased to LVL 10.6 million in the second quarter of 2013 from LVL 23.5 million in Q1, reflecting a potential suspension of investment until



President of the European Council

2014, when the Euro is introduced (Data from Trading Economics).

Ongoing scepticism

Some social anxiety remains, however. Despite the ongoing claims by the Prime Minister and Governor of the Central Bank that the “euro is well accepted in the society”, 11,782 people have already signed a petition against the adoption (10 000 is the minimum needed to introduce a referendum). Nevertheless, under the rules of EU accession treaty, Latvia is obliged to eventually adopt the currency. The rational reason behind this anxiety is fear of inflation in 2014 (the Central Bank predicts 0.2 - 0.3% annually), as what happened in Estonia (3.9% in 2012). However, the seemingly irrational pride in the national currency is reflected in the historically high exchange rate (LVL is “the most expensive” currency in Europe). When LVL was introduced in 1993 with the high exchange rate of LVL 1 = RUB 200, the anticipated fall in value never took place, and the trust in the new country and currency resulted in a consistent demand for Lats.

Wider impact

Now, the picture gets slightly more confusing if you look at the effects of the euro in Latvia on the rest of the EMU (European Monetary Union). On the one hand, as Hansen suggests, “the Eurozone is very happy to see Latvia joining, [as] it shows that (...) there are countries that find Eurozone membership attractive also in these circumstances “ and highlights the integrity of Europe. Adopting the Euro also improves the integrity of Latvia itself. Following the official announcement of euro adoption in July, Fitch Ratings rewarded Latvia with an upgrade of its credit rating to BBB+. At the same time, the relatively small economy of USD 28.37 billion (2012 in real terms) will not significantly contribute to the ESM (European Stability Mechanism) in terms of Euros, but rather with political support for united policies in the EMU and EU in general.

On the other hand, Latvia's economic independence from non - resident (mainly Russian) influence is still a questionable issue. Along with embrac-

ing Latvia as one of the “democratic and developed European nations”, EMU has to deal with the fact that 59.08% of all deposits in Latvia are held by non - residents, making up 5.9% of all deposits in LVL, automatically converted in EUR in January 2014. The dependence on Russia (mainly in terms of energy imports and deposits) shadows over what Reuters has called “the playground for Russian oligarchs”, reflecting possible volatility due to the “escape from the bear's hug”.

Let's hope for the best, that the new economic ties will strengthen Latvia's economy, calm down the people's anxiety, increase the trust in Eurozone as well as Latvia's independence from its big neighbour, and make this small Baltic nation the true example of how to strive after economic hardship. But, above all, let's hope that Latvia will stay in the spotlight long enough to assess all the effects of the Euro adoption in January 2014, taking into account the opinions of all.

SEEING IS BELIEVING



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Finding the Silver Lining

Fraser Harker evaluates Australia's options in an increasing volatile economic environment

AS A BRITON in Australia it was hard not to feel a sense of déjà vu in the run-up to the September 7th general election. The topics defined by the electorate as most pressing for contenders Rudd and Abbott to address included immigration, carbon emissions and how to reignite the stagnating economy. On the last point it seemed that those down under were now facing the sort of economic slump that we back home had been hit with some five years earlier. Then, Australia made use of fiscal measures to mediate the effect of the slump – this time the slowdown has a particular cause and thus requires a more particular response.

Australian resilience

As Figure 1 shows, Australia very much managed to weather the economic storm of five years ago. Its GDP growth managed to stay in the black at a time when most other developed nations were struggling. The reasons given for this resilience are numerous. The Rudd-led Labor party will no doubt attribute this to its swift fiscal response, whereby it increased public expenditure to boost demand.

This is a view shared by Nobel laureate Joseph Stiglitz. In an open letter entitled 'Australia, you don't know how

good you've got it' Stiglitz argues that Australia avoided recessionary conditions thanks to 'one of the strongest Keynesian stimulus packages in the world'. The stimulus provided was robust, early and a clever combination of short term cash and longer term investments. This provided liquidity for immediate expenditure and confidence that spending would continue in the long run. This tactic managed to maintain confidence and optimism in the economy and a time when others were getting cold feet.

Full of praise for Australia's response at the time of the crisis, Stiglitz bemoans the electorate's current fixation on austerity and government debt. To

force through excessive budget cuts now, at such a fragile time, could lead to the sorts of macroeconomic problems encountered by the likes of Greece and Spain.

Instead of austerity for austerity's sake it is of critical importance that Australia gets to the root of its current slowdown. To isolate this we return to the turmoil of 2008 to locate any other reason for Australia's economic vitality at the time and what could have changed. The primary reason as to how Australia managed to ride out the storm relatively unscathed lies not in IS-LM models or fiscal stimulus packages but in geography. As luck would have it, Australia finds itself located in prime

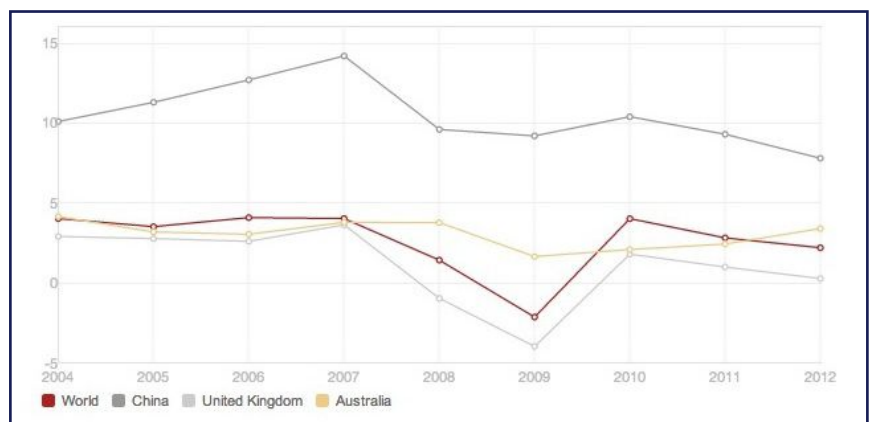


Figure 1: GDP growth. Source: World Bank

trading position with one of the world's major superpowers: China.

The Chi connection

Without a doubt China's GDP took a hit during the downturn. However, it still had levels of growth the envy of the western world. With this seemingly unstoppable economic growth came manufacturing and construction abound, with these came a demand for raw materials. Who was to meet China's needs? Australia.

According to the IMF, in 2010 China accounted for roughly 40% of all demand in base metals. Australia's mining boom was in full swing. In 2012 trade with China made up 7.6% of Australia's economy. The People's Republic had an insatiable desire to build and Australia was only too happy to supply. Wages in Australia's mining sector grew to never before seen levels. In May 2012 the industry paid the highest average wages in the country: 63% of all workers made in excess of \$2000 per week against a country-wide average of \$1328.

But as the saying goes, all good things must come to an end, a lesson only too real for those in a sector that is now far from booming. A slowdown in the Chinese market began as the full effects of reduced European demand were laid bare. This was fed down the food chain leaving Australia going hungry. In August of last year resources minister Martin Ferguson described the mining boom as over. Slowing Chinese growth had depressed commodity prices and the mining sector was no longer being viewed as the coal in Australia's economic engine.

What now?

The natural question from voters come September 2013 was what next? Where does the Australian economy go from here? How does it rejuvenate, reinvigorate and re-balance itself towards a more sustainable future?

For some there is still untapped potential in China but through the burgeoning middle-class. This will bring tourists to the shores of Australia with money to spend; Australia needs to make sure it gives them as many opportunities as possible to do so. But this goal in itself demonstrates further the

many different balancing acts simultaneously occurring.. Squeezing profit out of tourists should be done in such a way as not to overstretch already withered locals' pockets. Sydney is ranked as one of the world's most expensive cities and house prices alone are forecast to rise as much as 10% over the next year due primarily to Chinese residential investment.

Stiglitz believes that the worldwide economic turmoil may have a silver lining. Low worldwide interest rates should be seized to 'make prudent public investments in education, infrastructure and technology'. This will pave the way for a more adaptable and high-tech Australia that can change its position from a passive respondent to a driver for economic growth. Education is a point in itself. Whilst a strong education system is believed by many to have helped Australia to reach some of the highest standards of living on the globe, achievement statistics have fuelled worries that educational performance have started to slip. Smart investment could reverse this trend.

This thought-process was the

driving force behind the Education Investment Fund (EIF) announced at the peak of the crisis. As part of Australia's 'education revolution' it aims 'to build a modern, productive, internationally competitive Australian economy' by focusing on investments in tertiary education. Five years since its inception the fund has already pumped millions into renovating university infrastructure, funding world-leading scientific research and 'future-proofing vocational education' to provide highly skilled workforce.

It is schemes like these that have to provide the focus for Australia's attention, which will spark the transition away from the manufacturing and mining sectors towards a new service based economy with science and innovation at its heart. This will by no means be an easy feat. At the polls the nation went for Abbott and his Liberal-National coalition. To ensure success for his nation the new man at the helm has to understand the importance of investment in the evolution of the Australian economy. As the saying goes, you have to spend money to make money.



US Embassy Kabul Afghanistan

Brain Drain or Brain Gain?

Andrea Schmidtová discusses the exodus of young individuals from Central and Southeastern Europe to Western Europe

THE 2004 AND 2007 enlargement of the European Union eastwards has brought about, among other policies, free labour mobility. This has been perceived skeptically in the “old” EU countries which feared the so-called “Polish plumber effect”, meaning an uncontrollable influx of low-skilled workers from Eastern Europe willing to work for minimum wages.

However, free movement of human capital has posed challenges for the newcomer countries as well, in form of a drastic outflow of young, motivated and well educated individuals into western countries with arguably better career prospects, financial remuneration and standards of living. This ‘brain drain’ poses a threat to the sustainability of long-term growth in source countries. Therefore, a sensible mix of policies is required to balance and partially reverse the lost high-skilled labour in Eastern Europe.

Brain drain

Outflow of high-skilled labour has been observed over multiple phases, starting with the exodus of British scientists to the U.S. in 1950s. Upon becoming official members of the EU, the relatively underdeveloped countries of the Eastern European region harmonized their migration policies with the rest of the Union. This relaxation of rules set the ground for brain drain.

Such loss of highly skilled workers is generally considered to have strictly bad effects on the source country ranging from lost productivity, to public resources wasted on higher education of potential migrants, especially considering that university education is heavily subsidized - if not free - in most of the Eastern European countries. The brain drain negatively affects the potential of the home economy and adversely impacts public finances, however, there is a positive side to that story.

It has been empirically proven that

if a small, open economy is compared to that with severe restrictions on migration, the former enjoys greater level average human capital which in turn supports higher productivity and increased long term growth. That is possible because in a closed economy, career opportunities are limited and thus incentives to invest time and resources into education are limited. However, if there is a positive probability of migration in the future, optimising individuals choose higher levels of investment into human capital in the light of higher returns to human capital available abroad, a so-called “ex ante” brain effect arises.

There is a significant level of uncertainty of future migration. Factors to be taken into consideration involve the

time lag between making the decision to engage in higher education and the actual execution of migration. A person may not move abroad in the future because of changes in migration policies, family circumstances, or simply that individual preferences evolve over time. Out of all the people who decided to invest more in education, some will emigrate (ex post drain effect) and some will decide not to, meaning that the average level of human capital increases even in the presence of brain drain.

Brain gain

Consequently, a higher average level of human capital in the current generation also translates into a higher level of human capital in the next generation. Such intergenerational transmission is a



form of beneficial brain drain and has positive effects on long-term growth and sustainability.

The other positive effect on the brain drained economy arises when high-skilled workers return from abroad, which induces higher investment into human capital and higher productivity as they bring along newly acquired knowledge and skills. This might be because of personal reasons and ties to the home country or because of unraveling of the foreign labour market with asymmetric information. Employers abroad may lack the framework to assess individual productivity and skills of migrants upon their arrival and so they offer them the same wage. As soon as they are able to distinguish the relatively higher-skilled worker from the rest, a wage differential is introduced which may serve as an incentive for some workers to return home. Another reason for coming back might be that foreign employers favour their own citizens who are fully assimilated in case that the immigrants have not completely overcome cultural and language barriers, which naturally arise upon moving from country to country.

The right incentives

Although brain drain has some positive effects on the source economy in form of higher average level of education, it is important to incentivize the best and brightest to either stay in the country or return after they gained experience abroad in order to fully exploit the potential of free borders. An ideal policy design would induce brain circulation – the international exchange of knowledge. Such proposal should minimize the “push” factors which force people to move abroad and maximise the “pull” factors incentivizing the return of high-skilled labour.

A related case study has been conducted on recipients of OSI scholarship, which offers the most talented graduates free tuition at prestigious universities abroad under the condition that they must return to home country for a given period of time to work. The respondents have identified the push factors as limited career prospects, wage differentials, administrative obstacles, outdated infrastructure

and deteriorating prestige of science and creative activities in Eastern Europe. The most important pull factors would be improved working and living conditions, international engagement, investment into research and development and an overall better intellectual climate.

Therefore, the governments should overhaul their strategies in line with the proposed push and pull factors, for example in terms of investment into science and education and fostering their contacts with respective diasporas (the scattered population from a common origin) to encourage knowledge exchange. A temporary positive discrimination of returnees in the areas of tax, employment or housing could also induce reverse migration. In order to retain the educated youth, policymakers

should also consider taking actions that will induce foreign direct investment with added value and that will make it easier for potential entrepreneurs to set up a business, including a stable and reliable political and judiciary system and a sensible taxation system to name a few.

The currently ongoing global battle for the best and brightest should not be about winners and losers. The ideal economic outcome would arise when knowledge is shared and exchanged across borders and labour put to its most productive use. Migration should certainly not be hindered, as for most countries people with tertiary education have the highest migration rates. Above all, it is not a problem if the talented people leave, only if they don't return.



David Sim

Robotic Bees and Holographic Trees

Philip Duffy reviews the potential of biodiversity offsetting in the United Kingdom

THE NEED FOR government intervention to protect our environment generally receives acceptance by most major political parties and the public at large in the UK. A pivotal component of the value is its 'biodiversity value'. Biodiversity, simply defined as the total variation in life-forms, can provide a plethora of ecosystem services which enhance human welfare. However, it has been internationally recognised since the early 1990s that the stock of global biodiversity is rapidly declining and attempts to halt this decline have failed to dent this damaging trend. In response to the failure of the UK to reach its target to reduce the rate of biodiversity loss by 2010, the Department for the Environment, Food and Rural Affairs (DEFRA) have designed and are currently piloting a new initiative - Biodiversity Offsetting - which they hope will reverse the decline of the UK's biodiversity stock through the creation of a quasi-market mechanism for the exchange of 'biodiversity offset' licences. The offset concept is viewed with suspicion, with some branding such schemes as a 'license to trash nature'. Others see it as a pragmatic way for businesses to address their wider social costs and prevent negative outcomes for future generations.

Why protect biodiversity?

Unlike the benefits of reducing waste or carbon emissions, the benefits gained from reducing the rates of biodiversity loss are often less tangible. A useful conceptual tool is to think of the services which, if not provided by the environment's biodiversity, would need to be provided by society at considerable cost. Such services include water purification, pollination, nitrogen cycling, flood prevention - to name but a few. Crucially, the value from all of these services are

not traded in a market with a defined price. Biodiversity is thus a pure public good. Some categories of natural capital can be substituted relatively efficiently with other forms of capital. Society as a whole can potentially compensate for depreciations in mineral wealth by building up wealth in other areas such as physical, financial and intellectual capital. These ecosystem services cannot be feasibly replaced by physical infrastructure or financial assets; we require a minimum level of natural capital to provide for human well-being into the future...unless we can picture a future where agricultural crops are pollinated by robotic bees and trees in public places are replaced by holograms.

However, the benefits of economic growth, development and job creation (the creation of non-natural capital) are perceived by economic agents as greater than the cost of losing biodiversity (the loss of natural capital). Recognition of the environmental costs of development did become more of a concern in the latter half of the 20th century, with the legal requirement for environmental impact assessments (EIAs) being introduced in many countries. It is clear; however, that the effect of these regulations has not stemmed the depreciation of the UK's biodiversity stock. Although an EIA will identify areas where a developer can minimize its biodiversity impacts, a residual net loss will almost always occur from any development. This is where the case for biodiversity offsetting can be made.

A biodiversity offset is 'a measurable conservation outcome resulting from actions designed to compensate for significant adverse biodiversity impacts from project development after appropriate measures have been taken'. Offsetting will not replace, but rather complement, existing legal requirements for

developers to minimize environmental impacts on site. The aim is to create a domestic market for offsets in which developers can purchase a given quantity of biodiversity units, equal to (or greater than) the loss caused by the development. However, even if creating a similar trading scheme is seen as desirable, it is theoretically more complicated. Unlike similar markets for environmental goods where measurement of impacts are relatively straightforward, setting up a market for biodiversity will present more of a challenge because of the problem of measurement of different habitats and environments - how can we compare apples and bananas with-out prices?

Counting the cost

DEFRA's offset initiative presents an objective framework for quantitative assessments of biodiversity value. A provider of biodiversity units (in theory, any landowner) will first have to set aside an area of land and assess its quality to give a reliable estimate of 'baseline' biodiversity value. The provider would then plan what actions he/she would take to improve the biodiversity value from this baseline over a given time period. The difference between the baseline biodiversity value and the projected biodiversity value represents an addition to the overall stock of biodiversity, which can be then sold to a developer to offset any loss of biodiversity the developer incurs. Areas are given differing scores dependent on the size of the offset area, the distinctiveness of the habitat, an independent assessment of the 'condition' of the habitat and the difficulty of restoring the given habitat from the baseline.

Potential pitfalls

There is a worrying potential for moral hazard on both sides of the market.

Providers of offsets are not required to have delivered the offset before they are paid by a developer. Biodiversity units can be awarded in expectation that a certain outcome will be met. Thus, there is a very real danger that providers will renege on their commitments and the supposed offset will be jeopardised. Clearly, biodiversity offsets will only achieve results for conservation if they are adequately designed, implemented and enforced, which will prove much harder than it initially seems.

A second problem lies in the measurement of biodiversity. Unlike carbon dioxide, quantifying a 'biodiversity unit' will be subjective, costly and potentially oversimplified. There is an evident trade-off between the quality and cost of a biodiversity assessment. Extensive surveys would come at substantial cost which would have to be borne by businesses in the form of increased red-tape and regulation, or by government departments and agencies which are facing the longest period of sustained budget reductions in modern times. On the other hand, biodiversity value could be determined very simply with a few vague variables, quite similar to DEFRA's actual proposals. I believe that DEFRA's proposal is more workable than a more extensive series of surveys, but it does come with its own drawbacks.

There is a risk that companies may consider certain habitats to be particularly difficult and thus costly to offset, leading to an incentive to focus instead on less complex ecosystems that may be cheaper to conserve. Because biodiversity value (as defined by DEFRA's proposals) only takes into account ecological aspects, there is a possibility for a geographic imbalance of offsets. The scheme could have a detrimental effect on 'green-belts' around English cities, for example. Housing developers, who at the moment are buoyed by the government's 'Help to buy' scheme, could potentially put pressure on government to relax building restrictions, whilst promising to offset their impacts by buying biodiversity units. Much more research has to be done in ensuring both ecological and 'human benefit' equivalence in measuring biodiversity units. As recently highlighted by the 'Project

Wild Thing', biodiversity value has an impact on human welfare. As concerns grow over 'nature deficit disorder' in children brought up in high-density urban places.

A viable solution

Despite these potential drawbacks of the current DEFRA initiative, these could be addressed through careful policy design. There are essentially three positive arguments for biodiversity offsetting. Firstly, it is a well-established practice for companies who are granted temporary permits to disturb land (such as mining companies), to commit to restore disturbed land to its original state after activities cease. Society should prefer this money to be spent, not in aiming for "perfection" in the area disturbed, but rather to see that budget used to protect more biodiversity or biodiversity of higher conservation value in other areas. Biodiversity offsetting would provide a mechanism through which a more efficient allocation of such funds could be achieved to protect the maximum biodiversity value possible.

Another benefit is the potential to address a negative and unintended consequence of conservation legislation. For example, by making it illegal to harm endangered species, one effect of laws such as the Wildlife and Countryside Act has been to turn endangered species

and biodiversity into potential financial liabilities – limiting the potential land-uses of assets.

However, with the ability to sell endangered biodiversity as offsets, the presence of endangered animals or a particular habitat will be converted into a financial asset in itself, giving private landowners the rights to the social value of their assets and an incentive to protect these assets. Finally, biodiversity offsetting will be an important step in embedding the environmental costs of development and economic growth into government decision-making. With an objective assessment of biodiversity, the costs of development can be successfully offset without the need for draconian, inefficient and costly case-by-case assessments of project proposals.

At a time of fragile economic recovery, the pressures to kick the environmental issues such as the protection of the biodiversity value into the political long-grass in the UK seem more intense than ever. However, biodiversity offsets offer a potential compromise between the dual priorities of economic growth and environmental stewardship. By transforming attitudes to environmental protection from the realm of business costs and red-tape, to one of tradable financial assets, biodiversity offsetting is, in my opinion, an idea whose time has come.



The Land of the Free and Unequal

Melissa Parlour describes the issues raised by increasing economic inequality in the United States

DEMOCRACY IN THE United States began with the words “We the people, for the people” but the United States has begun to fail on the pillars of its foundation. through the allowance of severe economic rents and the continued ignorance of the rich’s manipulation of the economic system, creating inefficiencies throughout. This raises the question of the role of government in creating a balance between economic growth and managing inequality.

Top heavy

Currently in the United States the top 1% holds over 40% of all national wealth, seeing their average wealth increase from \$1.1 billion to \$3.8 billion from 1982 to 2011. Additionally from 2009 to 2012 top 1% incomes grew 31.4% while the bottom 99% grew by only 0.4% thus the top 1% captured 95% of all income gains in these three years following the Great Recession. This symbolizes the shift away from true entrepreneurship and the idea that the growth of the few will aid the growth of

the many, towards the concept of the rich manipulating the system for their own gains.

This manipulation is permitted by the US government through the rent seeking of the rich. To put it simply rent seeking is the way in which the current politics allow the wealthy to take at the expense of the masses without adding value to the overall economy. This includes, but isn’t limited to, direct transfers or subsidies from the government, laws that make the government less competitive and laws that allow environmental degradation for the benefit of a corporation. Rent-seeking thus is distorting resource allocations and making the economy less efficient.

Crippling inequality

Inefficiencies are found among societies with high levels of inequality and coupled with a large rent seeking culture, doesn’t maximize economic growth. This is most evident in countries with large, visible inequality such as those in emerging markets where growth is not

reaching its full potential.

In China, for example, the incoming money from abroad is filtered through inefficient state industries. Similarly, Russia and India are both socially polarized countries because money is earned from family connections and the exploitation of their economies, as opposed to entrepreneurial activities. This is evident to a certain extent in the US economy where the rich divert revenues from the government who could redistribute to the poor. This is seen through tax evasion where the US government approximates an annual loss of \$400-\$500 billion in revenue.

Inequality is also highly inefficient because without sustained widespread growth more people are pushed into the bottom levels of poverty. In South Africa for example, even if they continue their current growth it is predicted that they will have an additional million people pushed into poverty by 2020.

As the people in the middle class are not receiving a fair amount of income, they are unable to contribute to the economy. Thus, not only are they being pushed down into relative poverty, but also are being strangled by the cost of the pleasures of the rich, guised as the cost of economic growth.

Balancing regulation and growth

Governments around the world then face the dilemma of how to balance the regulation of inequality whilst promoting economic growth. As they aim to help the people, most employ a form of welfare to minimize poverty, but also incentives to maximize economic growth. These incentives often include tax relief to the rich if they invest in the economy, or the issuing of industrial revenue bonds to businesses, which provide the firm with money to invest in capital and supplies. Additionally,



A Golden

through tax policies each attempts to establish a distributive system of social benefits to those who need them while providing public goods to the entirety of the nation.

One of the main arguments against the increase in taxation is that it will harm the current rate of economic growth. The logic is that the government is taking money away that could be more productive in the economy. Historically, however, this idea about stunting growth is untrue. Under Reagan and Thatcher, the US and UK dramatically reduced tax rates, but the economies did not grow any faster than countries such as Germany and Switzerland whose tax codes remained unchanged. While the economies differ, the countries that maintained their higher tax rates did not seem to have been adversely affected.

As the government seeks the proper balance, the question is how will it attain a more equal society while creating a more efficient economy?

A more equal society?

Inequality provides incentives which drives economic progress promoting innovation and creativity. Yet inequality is natural and helpful only to a certain extent, which is where the government comes into play. Even though inequality is natural in the market, the government's role is in the creation of a fair market place where the laws are clear and enforced. Thus the government determines not only the establishment of inequality but also the continuation of it through inaction. The government thus needs to find the balance between what they allow in the name of economic growth and the limits they provide on the exploitation of the market.

The United States currently needs to adopt a three faceted approach to manage the growing inequality. Through taxation, government spending, and regulation the government can gain a better grasp on the ever-increasing gap between the rich and the rest of society.

First off, through progressive taxation the government is trying to promote the growth of opportunity among the entire population. However, since the 1960s the US has seen a sharp decline in progressive taxation due to a



drop in corporate taxes and combined with a drastic change in the composition of incomes at the top; away from solely corporate gains to personal income escalations through excessive bonuses. By amending the tax code to become more progressive not only will the government increase revenue, but also reduce the rapid growth of personal incomes at the expense of the poor.

Secondly, government spending needs to refocus to the wellbeing of the entire country. Currently in the US, the housing subsidy to the top fifth through mortgage-interest relief is four times the amount spent on public housing for the poorest fifth. If the US was to refocus its efforts on the entire population not only would it benefit the poor through expanded welfare programs but also help spur economic growth through extended investment in public goods, such as infrastructure and education.

Thirdly, as the government increases regulation to reduce the loopholes exploited by the rich, the economy becomes more efficient as this limits economic rents. Economic rents are defined as the amount paid in excess to the opportunity cost of producing a good or service. In a perfectly competitive market it does not exist as competition brings prices down until it equals the opportunity cost of production. Economic rents symbolize inefficiencies in the market and are the result of individuals abusing the market which is not perfectly competitive. As the

government implements stricter control on corporations and the top one percent of the nation, they will ideally no longer be able to manipulate the system and take advantage of the less well-off allowing a broader base of economic growth.

Around the world many countries have started to implement similar tactics in hopes of managing inequality, but none have fully adopted the three faceted approach. Latin America, plagued with inequality, has begun investing heavily in their school systems and in cash transfers to the poor, which is showing hope of lessening the gap between the classes. Similarly in India and Indonesia the governments are cutting back on fuel subsidies in hopes of reducing economic rents in that industry. Even in countries with less inequality such as Sweden and Britain, the governments are setting reform into motion to aid education and simplify their welfare systems.

Contrary to the commonly held belief that in order to achieve a better social state the government needs to grow, it simply needs to adjust its focus and attack the manipulation that is perverse through American politics. By allowing distortionary economic policies and monopolistic powers to emerge, the government is not only promoting inequality but also weakening the economy. By addressing the exploitation of the poor by the rich, the government can help not only the less fortunate, but also the economy by reducing inefficiencies.

Habitat for Humanity: The Struggle for Environmental Protection

Briana Pegado advocates the need for balance in the environmental movement

THE ISSUE OF balance surfaces in many sectors within the world economy, but the need for balance is most pressing in relation to the ecosphere, given that our taste for excess and consuming more than we need has led to an imbalance of sorts in the earth system.

The world can be thought of as a living system comprised of different but purposeful natural processes. The planet supports these processes- the transformation of carbon dioxide to oxygen, the water cycle, the cycle of animal waste into fertilized soil and fossilized resources like petroleum. Many speculate as to whether humans have had a significant and negative impact on the natural cycles of this living system. Some theories argue humans could potentially have little or no impact since technology could simply be employed to correct any issues that arise. The environmentalist movement, however, promotes the idea that humans have far surpassed the natural store of resources of this earth and are moving quickly towards our own demise.

The environmental movement itself, however, needs to find a balance or stable compromise in order to be successful. When it comes to environmental destruction, many environmentalists believe that there cannot be compromise if we want to secure our future and avoid reaching an irreversible tipping point.

However, in order for it to be successful, environmental policy must balance out competing claims. Environmentalists seeking radical change must realize that this change can only occur with the cooperation of those who do not recognize that change is needed in

the first place. In order to accomplish this, environmentalists need to meet policymakers in the middle to make an economic case for environmental policy to convince nonsubscribers in power to make a change

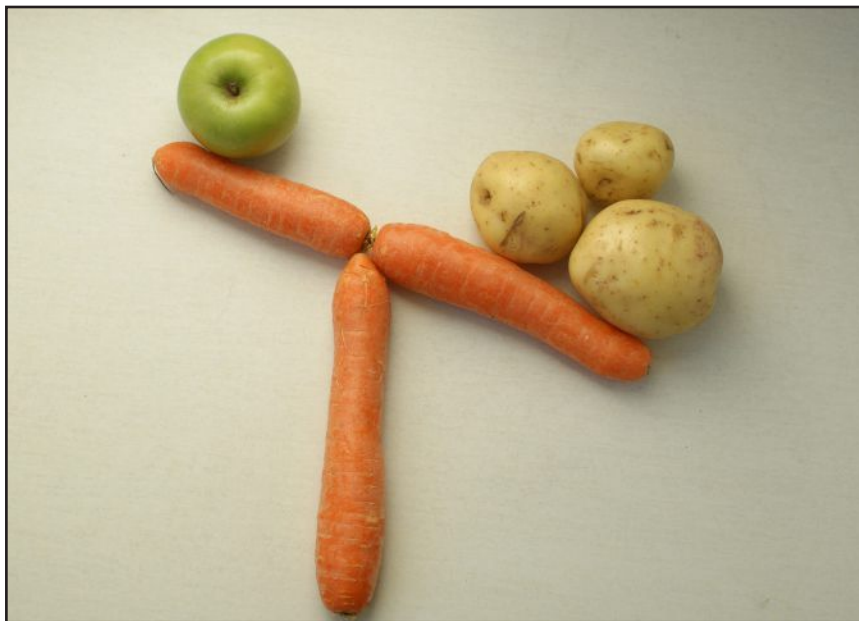
The beginnings

The 1960s sparked the environmental movement in the United States and simultaneously in the rest of the world. Rachel Carson's *Silent Spring* strikingly brought our attention to the environmental destruction that we were contributing to in our own backyards. Conservationists like John Muir were left behind as activists began to raise awareness of environmental destruction in the public consciousness.

Large organizations like Greenpeace, Friends of the Earth, and other environmental groups established themselves in the 1970s, with the aim of

protecting and defending the environment at all costs. Simultaneously, other groups surfaced that have been likened to the category of ecoterrorism, which has further polarized and demonized more radical groups within the environmental movement. A popular example is the Earth Liberation Front which has continuously used arson as a form of protest.

The environmental movement has slowly and gradually effected a change in people's consciousness. In the last 20 to 30 years, there has been a shift in consumer preferences towards more socially conscious and socially responsible products and services. Campaigns to raise awareness about issues such as fair trade, organic, low impact, locally sourced and environmentally-friendly products have been increasingly successful. On the supply side, major companies have changed their tactics



Laura Prager

Cameron Incoll



as some of their more destructive production methods have been revealed to the general public—such as production facilities dumping hazardous materials into local water sources in developing countries.

Marketing leads the way?

The turn of the century saw these changes reflected in advertising and marketing, bringing with it a turn in interaction with the consumer. Major companies launched their Corporate Social Responsibility strategies as a response to international outcry, as companies were found to be profiting from lenient environmental regulations and labour laws, exploiting inexpensive work forces in developing countries, abusing natural resources by using them inefficiently, and capitalizing on vulnerable land. Recently, the corporate sector has been forced to approach their socially responsible strategies in a more comprehensive fashion because of continuously changing consumer preferences.

Some companies like Coca-Cola and Unilever boast attempts to reduce their companies' and their customers' environmental impact, targeting sustainable sources of raw materials for their products, reducing waste in their supply chain, while providing education on good hygiene in countries where they produce their products. Against this trend, many argue that certain barriers exist to promoting a sustainable supply chain such as the

high costs associated with more sustainable methods, arguing that this often makes coordinating corporate-sustainability systems more complex and often inefficient.

However, these costs are minimized in the long run when more effective and efficient infrastructure is put in place. The issue here is changing corporate culture to incentivize corporations to invest in infrastructure to save money and allow them to make more of a profit in the long term. Efficient supply chains allow for the more efficient use of resources.

UMICORE, identified by Forbes as the most sustainable company in the world, follows the ethos that “what is good for the environment is good for the company”. An entire cohort of sustainably-run and minded corporations fall under the B Corp framework. These companies work to benefit society along with its shareholders by addressing social and environmental problems. This framework has supported the complete reshaping of a normal company's objective to simply make a profit. Companies with a B Corp seal mostly engage in business practices that focus on social and environmental responsibility. More and more companies have reached B Corp status and the framework helps set a precedent for sustainably-focused companies.

Further than corporate frameworks are social movements like Economy for the Common Good started by Christian Felber in Germany in 2010. The movement, including more than 1000 companies, advocates cooperation and working towards a “common good balance sheet” that showcases whether a company has abided by values such as economic sustainability, human dignity and solidarity. Beyond the focus of B Corporations, Felber's idea pushes for value-based businesses whose aim is not only to seek profit. These new values and their focus on responsibility are often unattractive to large businesses but if they want to adjust to a new socially conscious market they will have to adopt a bottom line that also accommodates social consciousness.

Public consciousness

Though these social movements and

frameworks do appeal to a socially-minded businessperson, the question is whether or not they appeal to the general public. Change in public consciousness is slow and limited to certain sectors of the population, in certain regions of the world. Most national pollsters and politicians understand that many people vote with their pockets. The positive public opinion of a President or Prime Minister is most often directly correlated to the state of the economy. If small companies and businesses, larger corporations, and influential sectors do not believe that it will be in their best interest to invest in the environment, why would they?

But as energy resources become scarcer, it will become more expensive to produce certain consumer products. As people begin to realize there are alternatives to energy-intensive and wastefully produced products, their habits will change. Consumer behavior is becoming more pro-environmental. Through their choices, consumers are beginning to put more pressure on companies to make more energy-efficient and environmentally responsible choices. The old business tradition that hints towards an unwillingness to invest in longer term and more efficient production methods does not cut it anymore.

In the end, it is not simply about environmentalists appealing to the economists. It is about all of us making a conscious decision to have a positive impact on our future. Economists call this an efficient use of resources that will strengthen our economies but we need to completely rethink the structure of our economy.

This issue goes further than climate change and environmental destruction. This issue goes further that what clean water resources we will have available in the future and whether we will have to rely even more on technology to produce our food. This issue reaches beyond a few inches of rising sea level and a few degrees of temperature change that will wipe out species that through the food chain fuel the animals we consume. This issue goes beyond a low carbon economy and reducing CO₂ emissions. It comes down to a trade-off between the present and the future.

Patent Problems: Health Epidemics and the Pharmaceutical Industry

Rosie Stock Jones evaluates alternatives to the patent system

HIV/AIDS WAS FIRST recognised as a disease in 1981, and by 1987 Zidovudine (AZT), a drug to treat the symptoms of HIV/AIDS and proven to significantly prolong life, was approved for sale by the US Food and Drugs Administration (FDA). Burroughs Wellcome held the patent, and patents were in force in the western world as well as in several African countries including in South Africa, who at that time had more citizens living with HIV/AIDS than any other country.

Spreading epidemic

In the early 1990's there was exponential growth in HIV contractions, two thirds of which were in Africa, a continent which houses just 11% of the world population. As a result of high drug prices, and low health insurance coverage, approximately 6000 Africans were dying every day from AIDS due to lack of accessibility to Retrovir, the AZT

drug.

As early as 1997, the South African government passed the Medicines and Related Substances Control Act, allowing the government to import cheap generic AIDS drugs. However, the threat of the withdrawal of US development aid meant that countries like South Africa were still reluctant to import generics. Eventually, as a result of a lengthy battle fought by the many victims of AIDS, and inspired by the USAs use of a 'public health emergency' clause to bypass patents during an Anthrax scare in late 2001, African countries began to import generic drugs from India, who could then supply the poorest patients with lifesaving medication for a symbolic \$1 a day.

Patent problems

The patent on AZT expired in 2005. However the issue of international drug patenting remains pressing. There are still second and third generation HIV/AIDS drugs to consider, and these will be affected by the WTO's Trade Related Intellectual Property Rights (TRIPs) agreement which is being negotiated as part of the Doha Round that began in 2001.

The original TRIPs agreement quite clearly extended patent 'flexibilities' to the 48 least developed countries, allowing them to opt out of patents for national health and other reasons. However this is now something that the USA and Europe are much more reluctant to agree on.

Furthermore, in a 2012 meeting of the TRIPs council, countries such as Canada, Switzerland and the EU attempted to get generic or counterfeit drugs produced by countries like India, Brazil and China classified as fake and

spurious drugs in order to cast doubt on the quality of generics, which in fact is usually very high. The EU is also still seizing generic drugs from India on their way to South America or Africa at European airports, and is attempting to get them classified as pirate goods.

Patents have been around in one form or another since at least the 15th century, and are intended to combat the public good characteristics of innovation. Innovation tends to be non-excludable, in that once someone has come up with an idea, the marginal costs of its reproduction are typically very low. In competitive markets, prices tend to marginal cost, this means that the innovator, after paying large Research and Development (R&D) expenses, will receive a very low price for their product and will be unable to recoup their fixed costs.

In addition, innovation is largely non-rival; one extra firm using the chemical AZT to produce a drug will not prevent others from doing so. As a result, innovation is considered a missing market: according to economic theory, without intervention, all firms have an incentive to free ride.

Throughout history, the most common solution to this problem has been to create a market with enforceable intellectual property rights, where the innovating firm is rewarded with defined property rights for their product, granting them a monopoly for a given length of time. The legal form of these intellectual property rights are known as patents, and the monopoly profits gained allow firms to recoup their, often large, R&D costs.

The welfare cost of this device is that it creates a monopoly and monopolies are widely considered to be inefficient



UNAMID

as they produce a lower quantity at a higher price than competitive markets. William Nordhaus, writing in the late 1960's on the optimal life of a patent, argued that if in doubt about the length of patent lives it is best to err on the long side, as for 'run of the mill' inventions the losses from a monopoly are far outweighed by the gains from the existence of the product itself.

But this is not the case for medicinal drugs, which are not ordinary inventions and for which it is not so obvious that these monopoly losses are outweighed. In the case of life saving drugs such as AZT, monopoly prices do not just mean reduced consumer surplus, they mean death.

In addition, the 2007 research paper 'Stagnation in the Drug Development Process: Are Patents the Problem?' written by Dean Baker for the American Centre for Economic and Policy Research (CEPR), claims on the basis of economic theory and anecdotal evidence, that it is plausible that perverse incentives created by patent monopolies are causing research costs to rise and progress to slow as a result.

If this is true, then the patent system as it currently stands could be substantially slowing the process of drug development by operating with higher costs than necessary and hence reducing the volume of research carried out per \$1 put in. And this is on top of the fact that patents also restrict other researchers' access to new information, and so already slow down the innovative process to a certain extent.

Lack of R&D

The pharmaceutical industry has often been accused of spending very little of its profits on R&D: a British Medical Journal study in 2012 revealed that for every dollar spent on basic research, \$19 is spent on promotion and marketing which has seen revenues rise by over \$200billion since 1995. Whilst drug companies still spend a higher percentage of their sales on R&D than other companies (the average is around 15% for drug compared to a 1.5% average in the Global Innovation top 1000), given the entire point of patenting in the pharmaceutical industry is to fund research, 15% does not seem like enough.



Moreover, it is not just businesses that fund pharmaceutical research; it was calculated by the Association of Medical Research Charities that in 2011/12 UK charities contributed over £1billion to the research of new drugs and via the Department for Business Innovation and Skills the government provided the Medical Research Council with £759.4 million. The government also indirectly funds much research through subsidising Higher Education Institutions which have been spending increasing amounts on R&D in recent years.

It would be incorrect to say that most UK medical research is currently publicly funded. However, seeing as public money funds a significant portion of research, it is irrational that companies take all the rewards, making patients and taxpayers pay the premium for what they may well have funded.

Another CEPR paper from 2004 projects that if the Free Market Drugs Act, which would have granted the US government the patent of publicly funded research so that drugs could be sold at generic prices, had been enacted, then states would have saved at least 50% on drug expenditures by 2013. In New York savings would have been \$9.3 billion, and this high figure highlights the inefficiencies of the patent system. On top of these concerns, there is the additional problem that there is little incentive for businesses to spend money on developing drugs for diseases that are predominantly found in developing countries, no matter how many people they affect, as patients in these countries

are unlikely to be able to afford the high prices and bring in as much profit as lifestyle drugs.

An alternative approach

In response to these issues, Nobel laureate and economist Joseph Stiglitz has argued for an alternative system of 'prizes' rather than patents. Instead of rewarding drug companies with monopoly power, he suggests that the reward be monetary, with funds being redirected from governments and charities, who are already spending a lot on R&D, to a prize fund, used to pay businesses back their costs so that drugs can then be competitively and cheaply sold. He additionally suggests tapping into foreign assistance funds for those cures that have widespread benefits in developing countries.

As the UK government does not already spend as much on medical research as states do in the US, where around half of all research is publicly funded, the jump to full government funding may not be feasible here. However it may work to run a prize system alongside an augmented patent one. This would reduce any uncertainty related to the ability of governments, charities and international organisations to pay out that may firms less likely to invest and could allow public bodies to fund research seen as socially valuable, without paying for, or eradicating cosmetic R&D, which there is of course still a place for.

Reforming the industry

The pharmaceutical industry is rife with

distortions; big companies like Pfizer and GlaxoSmithKline do not include the number of lives saved in their profit calculations, yet the sizeable amount that we donate to charity each year - £11.6 billion in the UK in 2010/11, suggests that this is something that society values. As a result, the marginal social benefit from the invention of life saving drugs is likely to be far higher than the marginal private benefit. It therefore makes sense to try and internalise these externalities, which is something that the monopoly incentives created by patents do not do. A prize, such as Stiglitz suggests, would work more like a subsidy and could be tailored to reward innovations with the largest public health benefits, bringing businesses' private incentives in line with public values.

The validity of pharmaceutical patents has been called into question in the

past, most noticeably in the case of AZT in South Africa. This issue is still an ongoing problem as the TRIPs agreement is set to enshrine the current version of property rights in international law and as disputes about generics are affecting international relations with BRICS countries.

Whilst there is an economic basis for patents, in the case of the pharmaceutical industry it appears that monopoly costs, the disparity between social and private values, and the large public contribution to medical research mean that patents are an inefficient mechanism. As a result, an alternative solution such as the introduction of publicly funded prizes for pharmaceutical research that enhances social welfare could hasten the invention of important drugs and improve access to these in poorer countries. This could be run alongside

a much shorter patent system in better-off countries to avoid the creation of off-putting uncertainty for firms.

Without the intervention of governments, patents would not exist at all, and as a result, governments should have the power to change the way that they work. The existence today of an internationally interdependent community complicates the issue. However, this complication should not mean that patents become black boxed regardless of how destructive they are. The international community has both the power and means to combat patent inefficiencies and externalities, so agreements such as TRIPs, which effectively enshrine patents in international law, should not pass without a serious economic re-evaluation of the costs and benefits of patenting in the pharmaceutical industry.

Has George Osborne's 'Plan A' worked?

Joshua Collins assesses the Chancellor's growth strategy

DURING THE RECESSION of 2008/9 the GDP of the United Kingdom contracted by about 5%. Now the economy is once again expanding; hitting 0.8% quarter-on-quarter growth in July-September 2013. This has led many, including George Osborne, to claim austerity has been justified. This inference is too simplistic and a more detailed analysis indeed shows that it is false. I will look at the arguments both for and against austerity, as well as how the narrative on austerity has been shaped and why it is so powerful.

Dealing with the deficit

When the coalition came to power in mid-2010, following the financial crisis, the UK had a record peacetime fiscal deficit of around 8% of GDP. The Office for Budget Responsibility (OBR) estimated that in 2010/11 over two-thirds of this deficit was structural. In principle, there is a structural deficit in the government budget

when expenditure is systematically higher than income and therefore this deficit would not disappear even if the economy picked up again. One of the major priorities of the coalition was to reduce the structural deficit, and so they announced both spending cuts and tax rises. 'Austerity' means reducing government deficits particularly in adverse economic conditions – and so Osborne's "Plan A(usterity)" began.

So why might fiscal deficit be a bad thing? Firstly, a large deficit can call into question a country's ability to pay its debts and thus raise the cost of borrowing. This can lead to a full-blown sovereign debt crisis, as seen in Greece. Secondly, if there are no idle resources in the economy, such as underemployed workers or unused capital, a deficit might 'crowd out' private sector spending, leaving total output unchanged.

These two points formed the basis of Osborne's Plan A. He stated that the UK was risking its ability to borrow

at low rates, especially with the highly possible Eurozone breakup hanging over market sentiment. He also argued that fiscal contraction could be expansionary, by lessening crowding out and subsequently increasing spending in the private sector.

Such a bad thing?

If a government is able to borrow and there are idle resources, many economists support running a fiscal deficit in order to boost demand and keep the economy at full employment. As regards "creditworthiness", the UK government almost certainly could have borrowed more over the last 3 years for two main reasons. Firstly the UK has its own currency, the Pound Sterling, in which the vast majority of its debts are denominated in this. Therefore, despite rhetoric, the UK has been safe from the capriciousness of the bond markets and the deficit could be funded through selling bonds to investors and the Bank

of England. Secondly, before the crisis, the UK did not have a particularly high debt-to-GDP ratio and still is very far from levels it has reached before. Interest rates are at their lowest since the 1960s and the debt to GDP ratio is nowhere near historical highs.

There is also strong evidence that there are idle resources in the economy. The UK unemployment rate is still well above pre-recession levels. In addition, the average number of hours worked and capital-usage have dropped. It is hard not to conclude that output in the economy is still well below its potential; the OBR, which provides the figures for the government, corroborates this fact in their report on the UK economy.

Therefore, the coalition both should and could have avoided austerity. However, cutting spending currently has strong public support. So, if the primary economic arguments behind "Plan A" are flawed, why has it gained such strong support?

Proliferation of austerity

The first reason is that debt invokes a powerful and negative personal comparison for many people; especially after many consumers overloaded on personal debt before the financial crisis and several debt-fuelled bubbles popped around the world following the years of "easy money". Politicians play on this by using analogies such as, "running an overdraft" or "putting it on the credit card" to describe the national debt and deficit. This is misleading; an increase in government expenditure will not linearly lead to an increase in government debt. A more appropriate analogy would be a solvent individual experiencing hard-times and refusing to borrow money to buy food, ultimately causing unnecessary damage and suffering to one self. This analogy captures the crucial fact that government expenditure affects the health of the economy, not just the fiscal budget.

The second reason is the failure to differentiate between the short term and the long term. The economic debate over austerity should be focused on the short term, on whether austerity will depress output now. Proponents of austerity, however, often point out more long-term issues, such as a low



national savings rate and a large public sector and argue that fiscal stimulus would worsen these and hence should be avoided.

While increasing economic productivity in the long-term requires supply-side improvements, such as technological development, this does not mean that the short-term effects of economic policies should be ignored. Keynes famously made this point: "But this long run is a misleading guide to current affairs. In the long run we are all dead. Economists set themselves too easy, too useless a task if in tempestuous seasons they can only tell us that when the storm is long past the ocean is flat again."

Misleading measures

It is again misleading to imply that recent recovery in economic growth means austerity was good for the economy. Nobel-prize winning economist, Paul Krugman, provides a simple metaphor to illustrate this point, "I mean, I

could keep hitting myself in the head, then slow the pace of the punishment, and I would start to feel better. Does this mean that hitting myself in the head was good for me?" Austerity was not expected to be the end of growth, simply a dampener on it.

From the economic standpoint I am forced to conclude that "Plan A" has not worked for the economy. A large structural deficit must, of course, eventually be addressed, but cutting spending and increasing taxes in adverse economic conditions is reckless and has probably damaged an already weakened economy. However, from a political standpoint it could be argued "Plan A" has worked well for George Osborne; it has large support from the public, economic growth has (seemingly) returned before the next election and it has created an environment in which to achieve other long term goals of the Conservative party such as shrinking the public sector and cutting business regulation.

Salaries by the Dozen

Cecilia Mihaljek investigates Switzerland's cap on executive pay

DISCUSSING YOUR SALARY In public may be in bad taste, but in Switzerland, it stopped being a private matter several months ago. This is not a reflection of bad etiquette, but a reaction to a federal initiative by the Young Socialist Party (JuSo). The leftist group is proposing a new labor regulation nicknamed "1:12", dictating that the highest wage within a firm cannot exceed twelve-fold the lowest.

While the initiative may seem outlandish to an international observer, Switzerland's largest radio and television broadcaster SRF recently carried out a poll in which 44% of voters were in favor, and 44% were against. If the undecided 12% tip the scales in favor of 1:12 on November 24th, this would not only jeopardize the enviable international standing of the Swiss economy, but also the welfare of average Swiss citizens. In fact, the proposal would harm those it wants to help the most.

Executive scrutiny

Tempting as it may be, it would be mistaken to assume that there is a nationwide political tendency towards the left: this September, a referendum eliminating military conscription was rejected, and working hours for shops were liberalized. But while JuSo does not maintain a strong voter base on other issues, they have managed to cleverly take advantage of the electorate's growing skepticism towards banks and big corporations.

Following the 2008 crisis, there were several international legal battles over Swiss banking secrecy, and numerous scandals around managers' high salaries and CEOs' severance packages. Predictably, reports of Novartis (a pharmaceuticals company) awarding their ex-CEO a severance package of CHF 72 million or £49 million (with an approximate 1.5:1 CHF to pound sterling exchange rate), or Roche's (ditto) CEO earning 261 times his lowest-paid employee's wage, have led to feelings of alienation

and intimidation across the political spectrum.

Earlier this year, Swiss voters already passed an unusually restrictive law called "gegen die Abzockerei" (best translated as "Referendum Against Rip-Off Salaries"), affecting all companies listed on the stock exchange. Shareholders now have stronger voting rights allowing them, among other things, to determine the aggregate earnings of the board and management. Board members are subject to annual elections and cannot receive compensation other than their salaries, and are held accountable by company statutes every penny they spend. If the new legislation does not sound drastic enough, the punishment given for not following it can lead up to three years' imprisonment and a fine of up to 6 years' remuneration. Yet many are still searching for an even stronger antidote to "Abzocker" – a uniquely German word originally meaning something along the lines of "con artist", but now almost exclusively used to characterize high-salaried corporate executives.

Battle for hearts and minds

The media campaign leading up to the November 24th vote resembles that of the Abzockerei referendum: different interest groups are taking every opportunity to engage in fear mongering. But these corporate "con artists" are neither as common nor as problematic as JuSo would like us to think. Only twelve companies were in the spotlight for their extremely high wage ratios (all above 1:100), or accession and severance packages (with the records at CHF 26 and 72 million respectively). All of these companies are globally active: seven rank 268 or higher in Forbes' Global Fortune 500.

Within a global context, intra-firm wage inequality can be rationalized, if not justified. However, most of the Swiss population is employed in small and medium-sized enterprises (SMEs), which make up two-thirds of domestic

companies, and can hardly be compared to giant global corporations. These small and medium-sized firms cannot operate with high wage ratios purely due to their size: revenue is not high enough and there are not enough levels of management to accommodate, or validate, such a wage structure.

Carl Elsener, the CEO of Victorinox (the manufacturer of the iconic Swiss army knife) earns CHF 300,000 annually, six times more than the lowest-paid employee in his firm. For comparison, Nestlé's CEO Peter Brabeck earns CHF 7 million annually, which is 215 times more than Nestlé's lowest-paid employee. But Nestlé employs 350,000 worldwide and brings in revenues of CHF 98 billion, equivalent to over 16% of Swiss GDP, whereas Victorinox employs only 1,800 people worldwide and brings in revenues of CHF 500 million a year.

These figures illustrate an immense gap between the two CEOs' responsibilities. It seems reasonable that their salaries should do so as well. Moreover, in Universum studies most globally operating Swiss companies are deemed "ideal employers": three are in the global top-50, and ten are in the Swiss top-100. In other words, global firms' employees are happy with their jobs and earnings even with high intra-firm wage inequality.

Unintended consequences

In its attempt to solve an imagined problem, the 1:12 initiative could have severe unintended consequences. JuSo's choice of 1:12 is arbitrary (they have even contradicted themselves by citing a University of Zurich study claiming 1:20 is an ideal ratio), thus involving firms outside of the target "Abzocker" group.

For instance, the partially privatized railway company (SBB) operates with a relatively moderate 1:23 wage ratio. Trains are not merely a means of transportation, but a cornerstone of Swiss society: most low-waged employees live in



the suburbs and work in cities, relying on trains rather than cars for their daily commute. It is necessary for SBB to attract highly qualified leaders to run this complex system. But if 1:12 is imposed, ideal candidates would most likely take a better offer elsewhere.

The only way to offer the best employees a competitive salary would be to reduce coverage or raise prices on services that are essential to Swiss citizens. JuSo's initiative was never aimed at these companies, but they are the ones that might end up losing out. The international corporations that JuSo actually takes issue with would simply move on elsewhere, an option that the railway company does not have.

But the most important collateral damage of JuSo's initiative could be Swiss workers themselves. There is not only one wage ratio between the lowest and highest earner within a company: there is a complex wage structure determined by a variety of interdependent ratios.

If the CEO's wage goes down, all the others' wages will have to decrease in proportion. If a CEO and human resources manager currently have respective wage ratios of 1:24 and 1:12, the human resources manager would most likely earn 1:6 under the new regime in order to maintain a competitive wage structure within the firm. Middle management, office assistants and consequently, those working on an assembly line would also have to be

paid less – everybody's welfare would decrease. Swisscom, Switzerland's leading telecommunications company with a current wage ratio of 1:35, estimates that they would have to adjust 5,000 employees' salaries downwards as a result of 1:12.

Realistic scenario

JuSo naïvely hopes that the opposite effect will occur, with CEOs increasing the lowest wages in order to preserve their high salaries, thus augmenting total welfare. However, this solution is financially unviable: a compromise where low and high wages "meet in the middle" sounds more realistic. But such a wage structure would destroy productivity: there is little incentive to perform well if a promotion implies a larger increase in workload than pay.

Companies hiring low-skilled workers would also have trouble justifying such an uncompetitive structure, especially after taking the costs of on-the-job training into account. More worryingly, an increase in low wages would reduce incentives for people to obtain higher education: with a 20% high school graduation rate, Switzerland is already too dependent on foreign professionals. In the far more likely scenario that all wages would be pushed down, the question is how far they could fall.

There is no official minimum wage in Switzerland, but the Federal Committee of Trade Unions protects 40% of the country's lowest-paid workers' wages

at CHF 22 (£15) per hour. It may be well above most developed countries' minimum wages, but the cost of living in Switzerland is high, too. If the CHF 22 per hour standard were sustained and extended to all professions, jobs would be outsourced to countries with a lower or no minimum wage, in an attempt to raise the "lowest wage" to that of a higher-earning employee.

This is crucial for firms involved in production and those that are already active internationally and could switch location with relative ease. If the CHF 22 standard were not sustained, the lowest earners would start earning even less: already 5% of men and 12% of women earn CHF 18 (£12) per hour.

Maintaining the business environment

Switzerland's economy relies heavily on a maintaining a favourable business climate with low taxes and a competitive regulatory environment. This allows the private sector to grow and attracts foreign firms and highly qualified workers. The 1:12 initiative could damage this business model beyond repair. With large foreign firms moving out and fewer domestic firms having an incentive to expand their operations tax revenues would fall and there could be devastating effects for the economy on both an international (lower exports) and national level (less consumption).

One might argue that Switzerland is profiting from foreign experts at cost

to countries suffering from brain drain, but it is highly unlikely that 1:12 would have any effect on global equality. High earners of companies headquartered in Switzerland would simply be relocated to other well-paying jobs elsewhere in the world. Some smaller firms that shifted their entire operations to Switzerland in order to benefit from lower taxes would also likely back out. Other countries would be eager to fill the vacuum left behind by Switzerland: the Baltic states and Asian emerging market economies, for example, also offer low corporate tax rates, ease of doing business and strategic geographic locations.

Perhaps the most frustrating part of the 1:12 initiative is the illusion of doing good. The campaign's supporters have taken to the streets with the most hackneyed analogy in the history of political economy: a cake being cut to illustrate wage distribution. Copycat marketing is the least of problems with this depiction: it excludes those who do not work (e.g. pensioners or the disabled), and ignores income redistribution through state benefits. In Switzerland,

1% of the population's highest earners generate 12% of the country's aggregate income and account for 41% of federal income tax revenue; the top 10% generate 36% and account for nearly 80% in federal income tax revenue. A study by the University of St. Gallen shows that if these individuals were to earn only twelve times the amount of their lowest-paid employee, this would result in losses of CHF 2.5 billion (£1.7bn) for social security funds, and CHF 1.5 billion (£1bn) for the federal budget. The former would hit the weakest members of society the hardest; the latter implies cuts in healthcare, education and infrastructure funding. To compensate for this loss of revenue, it would be necessary to impose punitive taxes even on those earning less, possibly eliminating any positive effect of flatter wage distribution.

Under the current system, unequal distribution of wages facilitates equal distribution of welfare. This highlights the blind idealism and hypocrisy of 1:12 – instead of cutting the cake equally, they will end up with a smaller cake.

Rather than creating more prosperity for the lowest earners, the initiative would deprive them of the state-of-the-art healthcare, pensions and education system they have benefitted from until now – and that JuSo have celebrated in other instances.

1:12 is a boomerang policy that would disadvantage those it set out to help: low earners. It is understandable that the Swiss are enraged at some foreign CEOs: the lowest-paid Union Bank of Switzerland (UBS) employee would need to work 385 years to earn the 26 million that the Italian CEO Andrea Orcel was awarded as an accession package, or as JuSo put it, “just to show up in his office”. Anybody would wince at this figure, and that is the nature of the 1:12 initiative – it is an emotionally driven campaign trying to solve a misinterpreted economic problem. Switzerland's success model of a mutually beneficial relationship between citizens, government and firms ought to be preserved, and economists need to send a clear message to voters: if it ain't broke, don't fix it.

Indian Economy from the Window of the Gyanodaya Express

Alfio Puglisi's first hand observations of the current economic situation in India

MORE THAN 60 students of the University of Edinburgh recently took part in the study-abroad programme “College on Wheels, Gyanodaya Express”, organized by Delhi University. Gyanodaya express is an educational trip, this year in its 3rd edition, which gives students of Delhi university colleges and students from British universities the opportunity to experience and discover Northern India. Together they discover its cultural, historical, religious heritage, and learn about its current economic situation, by visiting different firms and

making reports about them.

India on a growth path

The Indian economy deserves our attention for many reasons. It is the tenth largest in the world by nominal GDP and the third largest in purchasing power parity. It is the world's largest democracy by population and the second most populated emerging power after China, as well as a member of G20 and one of the “BRICS” countries. From the late 1980s it has become an increasingly open economy through a series

of reforms, leading to increased foreign investment. Nowadays India presents a huge middle class and a large skilled work force that attracts many foreign companies.

The north of India is prevalently a rural area but some areas do present thriving business activity with well-performing firms and manufacturing companies. This is the case of Ludhiana, in the Punjab, considered the main economic hub of the region and one of the best business environments in India by the World Bank. Car parts of brands

United Nations



such as Mercedes and BMW are produced here. I had the privilege of visiting Cycle Heroes Limited, one of the most successful businesses in Punjab. Born in 1956 from the will of two brothers, it is nowadays the world's largest manufacturer of bicycles, with a volume of annual sales of over 4.8 million cycles which it exports to China, south East Asia and Africa. It is considered one of Asia's leading companies by Far Eastern Economic Review and one of the best entrepreneurship models in Asia.

In recent years, the Small Industries Development Bank of India (SIDBI)- an independent financial institution aimed to aid the growth and development of micro, small and medium-scale enterprises (MSME)- has played a significant role in stimulating the economy. It is one of the 30th best performing development banks in the world according to the latest rankings. The MSME sector is an important pillar of the Indian economy, creating employment and contributing to about 45% of manufacturing output and to about 40% of exports, directly and indirectly. In addition, SIDBI's assistance also flows to services such as transport, health care, or tourism.

Southern India is more developed in terms of infrastructure, but has a lower GDP than the north. Mumbai is a vibrant and dynamic city which contains the headquarters of many big multinational companies. In the near future, India will see investments close to US\$ 500 billion in infrastructure development- according to recent studies by McKinsey India group, with US\$ 430 bn of this in core transport and utility sectors. About one fourth of these investments will be implemented through a government-private partnership. This development in infrastructure will hopefully improve living conditions for Indians, as well as helping to boost India's financial industry, and will create new opportunities for investors, offering potential revenues of US\$10-12 bn.

The financial services sector has risen only recently, as we have seen with infrastructure development. Most of the banks are based in the south of India yet contribute to the development of the whole country. Whichever direction the global economy takes, India's position

for the near future is quite strong- it is predicted that it will still grow at a rate of 7.5% by 2020. And financial services are standing out as an incredible engine for growth in the overall economy; India's bank debt-to-GDP ratio is 54 per cent compared to 98 per cent in China. However, the recent economic slowdown has shaken the Indian economy. The lesson should be learnt; preemptive financial services regulations need to be implemented in order to stabilize the Indian economy in the future. Lord Desai, emeritus professor of London School of Economics also links the economic context to the political cycle and is optimistic about the near future. He believes that after the coming elections in May 2014 and once the new government is settled, the economy will start growing again.

Persisting problems

Despite promising developments, India faces many socioeconomic problems, including poverty, unemployment, crime in big cities and corruption. Rapid urbanisation is posing many challenges, as cities do not provide enough living space for the millions of people moving from the countryside to metropolitan areas. In order to survive people build illegal shelters next to rail tracks and under bridges- the so-called "slums". Many people do not have a stable job.

Indian Nobel prize economist Amartya Sen has written extensively on Indian economic development. His

work could be described as taking a "holistic" view of economics, examining the connections between economics, social welfare and individual freedom. Governments, he claims, should look at welfare and education as integral parts of economic policy. This is the view espoused by the vice-chancellor of Delhi University Lt. Parminder Sahgal and the "Gyandoya express" programme that I participated in. Their focus is on education and research, giving the possibility to less advantaged students to have access to university. In this way students can develop at most their capabilities, maturing intellectual skills and contributing to the political life of the society they live in.

To conclude, India is a country with great opportunities at the moment, attracting many foreigners' investors, with an ambitious infrastructure development programme and a dynamic financial sector, which ought to be regulated to enable stable growth. Challenges remain, however- poverty, unemployment and socio-economic inequality must be dealt with in the coming years. I believe the country has the ability to succeed and is on the right path of development.

A special thanks has to be given to all Delhi University students who took part in the "College on Wheels project, in particular to Anurag Agarwal, Amanmeet Singh Bathiya, Abhishek Periwal, who were great personal guides during my trip.



Healthcare Reform in the United States – Good Intentions, Bad Timing

Sibel Mal evaluates the healthcare system in the United States in light of the recent US government shutdown

THE MOST RECENT United States government shutdown (October 1 - October 17) was a direct result of failed federal budget negotiation talks within the Republican majority-led House of Representatives and the Democratic majority-led Senate, the two chambers that make up the U.S. Congress. The main subject of dispute surrounding the budget talks involved one of the key policy changes of the Obama administration: healthcare reform.

The weeks leading up to the October 1 deadline saw tensions bubbling between the lower House on the one side, which proposed to defund the 2010 Affordable Care Act, and on the other side Obama and the Senate, who refused all further negotiations. While all government operations deemed “non-essential” have resumed, a large divide remains on Capitol Hill regarding the healthcare reform. This begs an analysis of the healthcare reform both in principle and in practice. As will be seen, this differentiation is critical to the concluding evaluation on the controversial issue.

Political and economic nature of the reform

Healthcare reform is a very important item on the agenda of the federal budget, as the Affordable Care Act (ACA) has been implemented by the Obama administration to bring about incremental changes to the current U.S. healthcare system over the time period from 2011 to 2022. In 2014, all individuals will be required to have a health insurance policy. If employers cannot cover individuals, Medicaid, the public health insurance policy, will be expanded to offer reduced costs and higher

coverage to them. Medicaid expansion consists of offering affordable coverage for low-income groups and mandating purchase of personalized insurance (punishable by an increasing yearly fine). This requirement has financial implications for employers and taxpayers and is thus by Republicans declared as “unconstitutional”.

Why is healthcare reform such a major issue in the U.S.? The United States is one of the only economically developed countries that does not offer universal healthcare, in contrast to the UK's National Health Service (compulsory but government-subsidized public insurance) or the system in place in many European countries, where healthcare provision is funded jointly through taxes and employer contributions (with an option for additional private health insurance). Healthcare in the U.S. is comparatively expensive for both individuals and the government. The predominantly private healthcare system consists of deregulated insurance and pharmaceutical companies as well as highly paid medical staff to account for litigation costs.

When healthcare becomes a commodity, the market has a tendency towards systemic oversupply of medical services. Due to asymmetric information problems, where the sellers of healthcare services appear to know more about what is good for the client, demand can be pushed to meet this oversupply. According U.S. Senator Bernie Sanders, who is on the Budget Conference Committee, the U.S. spends 17% of its GDP – about 2.7 billion – on healthcare per year. By contrast, the UK and other European countries spend around 8% of GDP on

healthcare. Despite high expenditure, the healthcare system does not deliver impressive results in the aggregate: for example, there are no significant differences in life expectancy or other health indicators between the United States and countries that spend half the proportion on healthcare. The main weakness of the American system is that it fails to ensure universal healthcare for all. Due to high medical costs and lack of employer benefits, around 44 million Americans are without health insurance, and those that do have insurance could – prior to the implementation of the health care law in 2010 – be dropped for having a preexisting condition or other medical or financial troubles.

In theory, the ACA is a progressive initiative to offer universal healthcare coverage for all and reduce unnecessary healthcare spending. The Republican House is against borrowing more money and adding to the debt ceiling, which is based off the Congressional Budget Office (CBO) estimate that the ACA will cost the U.S. government just under \$1.1 trillion for the 2012-2021 period. This is mostly due to the \$1.5 trillion expansion of Medicaid, Children's Health Insurance Program (CHIP) tax breaks for low-income families and small businesses, and subsidy costs. However, this estimate does not reflect the much-debated tax increases that would drop the estimate by \$50 billion from the 2011 net cost estimates (thereby reducing the projected 10-year net budgetary deficit from \$759 billion to \$710 billion). In principle, the ACA sheds a very positive light on the future of the U.S. federal budget and citizens: it will be less expensive than the current system, and universal coverage will be

provided for Americans for the first time in history. The question remains whether the reduced overall spending of the U.S. government will be reflected in practice.

Is it feasible?

It is not enough for a policy change to appear beneficial in principle – it must also meet feasibility criteria in practice. In particular, the political environment should accommodate the reform – which apparently fails to hold for the Affordable Care Act.

In terms of funding to offset the expansion of Medicaid and other programs, taxpayers with an annual income of over \$200,000 (couples making over \$250,000) will be taxed 3.8% more and a tax on medical devices will be implemented. This is one of the main issues for the Republican Party, which argues that the American people do not want their tax dollars to be going towards other peoples' healthcare costs. In reality, there is a rather divided public opinion about the benefits of the ACA: in May 2013, a CNN poll showed that 54 percent of Americans were against the implementation of the ACA, while 43 percent were in favor of it. In September the same poll was conducted, with only 39 percent in favor of the law. Perhaps more relevant was a recent CNBC poll that showed that

59 percent of Americans were against defunding Obamacare if defunding and shutting down the government were to be the result of it. It is therefore clear that the public remains divided on the issue.

When one of the three bodies in the tripartite federal budget decision-making process does not agree on spending bills for the upcoming fiscal year, the government experiences what is called a "funding gap" – or shutdown. The U.S. has a history of shutting down 17 times since 1976, over similar heated issues such as abortion, funding, and cuts in various federal programs and initiatives. Funding gaps allow what is called continuing resolution (CR), or further budget negotiations, to take place with a pushed back deadline.

Since there is no clear majority support, it is possible that healthcare becomes a yearly topic of debate between the three bodies of government when deciding the annual federal budget. This poses serious risk for not only the viability of the healthcare reform but for the economic consequences this indecision might have on the federal government, public programs and individuals. As the recent shutdown showed, a funding gap would not only impact U.S. government operations but could affect global economy negatively as well.

Although the end to the shutdown

provided relief to what could have become a major national and global crisis, there are potentially dark days ahead for the U.S. economy. The Congress agreed on public spending budget until January 15 and to extend the debt ceiling to \$16.7 trillion until February 7. In the meantime, 29 Republicans and Democrats have been placed into a Budget Conference Committee to come up with a new budget by December 13. Whether the two parties will be able to find a compromise is going to be critical to the future of the U.S. economy. The failure to agree on the ACA in October has caused an estimated loss of \$24 billion over the course of 16 days, which casts doubt on whether the cost of fruitless negotiation actually exceeds the potential benefits of the reform.

Overall, the topic of healthcare reform has sparked much controversy within the U.S. government and in public debate. While the ACA is an admirable attempt at reducing welfare loss and ensuring universal medical coverage, the lack of majority support in the decision-making process is a cause for concern. At the risk of a costly shutdown happening every year due to failed budget negotiations, it might be beneficial for the Obama administration to reconsider the implementation of the healthcare reform until it receives more uniform political support.





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