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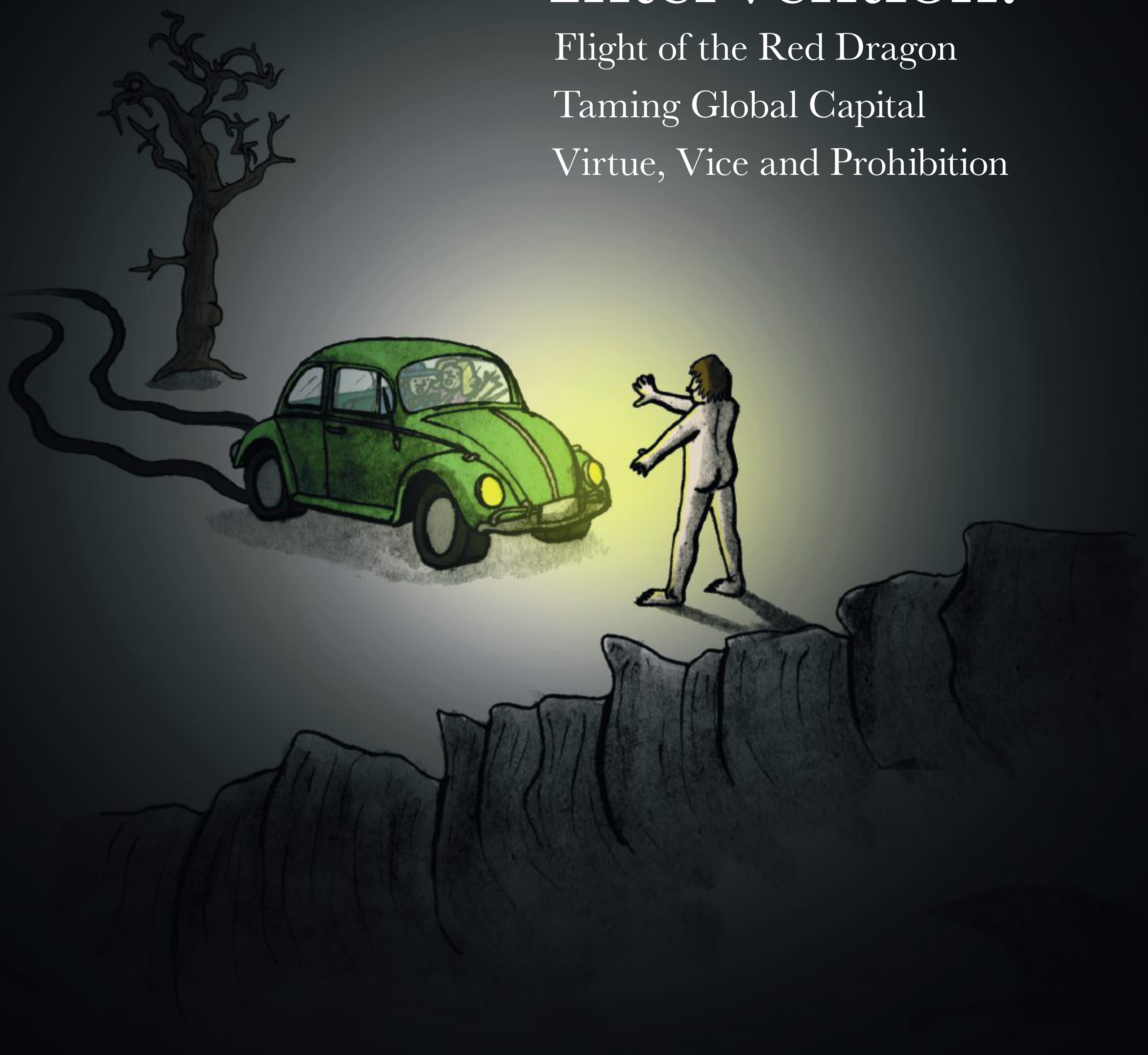
Intervention:

Flight of the Red Dragon

Taming Global Capital

Virtue, Vice and Prohibition



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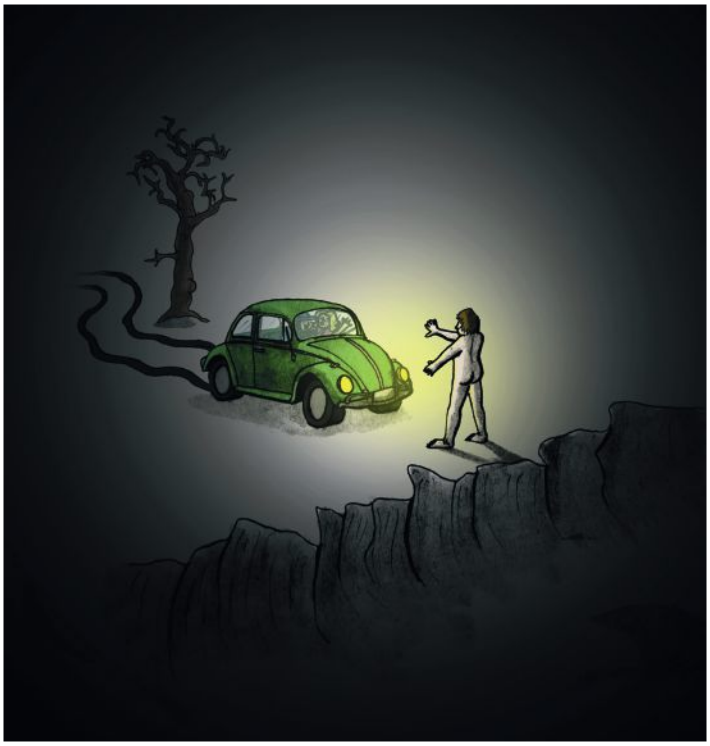

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Editor's Note

The onward march of *Insight* continues. Now in our third year of production, our brand new editorial team is delighted to present 'Intervention', which is the theme for this semester's issue. Educated in the logic of supply and demand equilibrium amidst the spectre of Adam Smith's "Invisible Hand", intervention could be interpreted as inimical to the instincts of the economics profession. If the multifarious attempts by world governments to deal with the impacts of the global downturn have failed to convince you otherwise, I hope reading this issue will compel you to think again.

Intervention is, and has always been, pervasive within our economy, causing the realisation of a free market to be elusive. The question is perhaps not whether we should intervene in the economy, but rather how. This semester's issue surveys government intervention, or lack thereof, across Europe, Asia and the Middle East. All the while, it will provoke you to consider the political and economic justifications for intervention, and caution you to contemplate what future is sown by our actions today.

Our Comment section continues in fine style. Online currencies, urban farming and articles on UK and Spanish austerity are complemented by critiques of the aid industry, conservationism, and the economics of prediction. This semester's Academic section considers whether we could have avoided the recent 'Great Recession', and is followed by the Review section, which includes a masterful investigation into inequality.

I would like to extend my thanks to the new editorial team, the writers and illustrators for all their hard work over the last few months, without which this magazine would not be possible. Support from our sponsors, the Economics Society and the School of Economics, has been steadfast, whilst the advice of the Managing Editor has been a constant help. Special thanks must go out to our new Illustration Editor, and above all to our Design Editor, whose painstaking precision infuses every page.

Knowledge, it is said, is power, and so if you have any feedback on this issue please get in touch – an email is provided on the opposite page. As the ink dries on the pages of this semester's *Insight*, the search begins for new writers and illustrators for the next edition; let us know if you'd like to get involved. On behalf of the entire Insight team, to readers old and new, thank you for reading.

Evan Williams
Editor-in-Chief

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Focus: Intervention

Intervention, of What Kind?

Clara Mascaró asks whether markets can really be free

Much of the debate regarding government intervention in the economy is framed in terms of intervention versus non-intervention, as a trade-off between market freedom and other values, and tends to overlook questions about how and where to intervene. But can there really be true government non-intervention? Can markets really be free? For a start, this perspective assumes that there actually exists a separate entity, the 'market economy', which can be dissociated from society and politics and hence be 'free'. But while it might be useful to model markets in this way, it is problematic to extrapolate this distinction to economic policy and consequently to view markets as separate, apolitical entities. This portrays government intervention as a merely technical issue, best left in the hands of experts, and it minimises the social and ideological issues surrounding economic policy. The result is that the democratic quality of policy-making is seriously undermined.

There is no such thing as 'free' markets; they are defined by a plethora of rules and boundaries specifying what can be traded (for example; it is forbidden to trade with organs, human beings or electoral votes), by whom (children below 16 are not allowed to sell their labour; immigrants cannot work without a permit), and how (transactions occur in particular institutions such as the stock exchange or shops; even street traders need some form of license). To argue that some regulations are more restrictive on freedom than others cannot be but a subjective view; 19th century commentators would find it outrageously intrusive to prohibit child labour, and they would be shocked by the amount of welfare provision undertaken nowadays even by 'liberal' governments such as that of the US. On the other hand, we've seen thousands of people marching on the streets to protest against cuts in government spending, arguing that without social justice there is no freedom.

If the same market can be perceived as having varying degrees of freedom by different people, then it becomes clear that the amount of 'freedom' of the market-based economy cannot be objectively defined. Ha-Joon Chang argues in *23 Things They Don't Tell You About Capitalism* that complete acceptance of the underlying and implicit regulations is what makes markets appear free, whereas "we see a regulation when we don't endorse the moral values behind it".

The state, as the ultimate source of power and democratic legitimacy, can, and indeed does, define the boundaries of what is 'freedom' and what are 'restrictions'. George W. Bush claimed that the $700 billion injection into the financial system through the Troubled Asset Relief Program (TARP) in 2008 was a "necessary intervention" to defend free-market capitalism. It is common to hear European leaders claim that austerity measures, which change the level and scope of government intervention in such areas as social services, with a significant impact on society, are "not pleasant but necessary". Thus, certain economic policies are presented as economic imperatives; the only possible responses to the current economic situation. By treating economic policy as a technical matter which can be defined objectively, any comprehensive public debate on the nature of interactions between governments and markets is suppressed, relegating alternative views to the streets or to small academic circles. Economic concepts such as the 'risk premium' indeed seem to be ubiquitous in the mainstream media and the institutional sphere, but it stops there; ostensibly short of a meaningful and critical engagement on the causes and implications of the economic crisis (or even more narrowly; the European sovereign debt crisis). And perhaps most worryingly, there seems to be no appreciated need in either of these spheres for such a debate.

Emily Cullen

Moving beyond a simplistic 'intervention/non-intervention' framework is necessary to engage in a normative debate on how we want things to be in our society, what moral or ethical values we seek to pursue, and hence in what ways government and market should interact; what constitutes a restriction on freedom and what doesn't. For these boundaries can change if deemed necessary, and indeed they have been changing continuously throughout history, often accompanied by violent struggles (which suggests how highly political an issue it is). Committing to the status quo, whether it is seen as good or bad, cannot be presented as apolitical; it is in itself a way of defining boundaries.

It is somewhat ironic that political leaders should insist so vehemently on the technical aspect of economic policy. The term 'economic' certainly commands much more respect than the discredited 'political' and all of its associated baggage of negative connotations. The Italian PM, Mario Monti, takes pride in presenting himself not as a politician but as a statesman, leading a cabinet of technical experts who, like himself, have not been elected at the polls. A segment of Italian society seems to appreciate the confidence with which this internationally renowned economist applies the prescriptions that for years he taught at Milan's prestigious Bocconi University, but one must ask whether, regardless of one's own ideological stance, this is good for the nature of democracy in the long run.

Economic policy is not simply an economic matter; it is first and foremost political. It creates winners and losers; so *who* decides and *how* is important. In true democracies, we would expect decision-making processes to be transparent, plural and democratic; pretending that economic policy is purely technical and not political, or justifying a policy on the basis of the demands of markets, only serves to obscure these processes. Likewise, it is misleading to argue in favour of or against market regulation, without specifying what kind of regulation one is referring to. It would altogether be useful to abandon terms such as the 'freedom' of markets or lack thereof, to drop the whole idea of 'markets' as abstract, separate entities, and to reassert the value of political economy for understanding the political aspect of economics. All this can only be conducive to a richer debate and better policy-making in the future.

Lessons From Financial Globalisation

Kati Venho takes a look at the impact of financial globalisation and the free movement of capital

Financial globalisation is the free movement and trade of capital assets in the international markets. Historically, international financial institutions have pressed for the removal of capital controls and promoted financial integration, convinced that it would enhance economic efficiency and catalyse economic development of poorer countries. Capital controls were seen as a form of state intervention that restricted the operation of the market and thus an impediment to welfare. After thirty years of financial globalisation, economists have called for revision of its outcomes and cast doubt on whether the benefits have materialised. This article will: examine the divergence between economic theory of financial globalisation and the real world circumstance, present some of the problems associated with financial globalisation, and discuss the implications of recent revisionist discourse.

Classical economic theory makes a straightforward case for the liberalisation of capital markets and argues that it allows us to reach a number of desirable goals. First, international lending and borrowing at times of income shocks enhances consumption smoothing. Second, free international capital movement should make investment more efficient by attracting money to where its marginal productivity and return on capital is highest. Marginal productivity, the additional output from one more unit of input, should theoretically be highest where incomes are low. Therefore, money should flow from rich to poor countries until marginal products of capital are equalised. Simultaneously, incomes are expected to converge, so developing countries should benefit from financial globalisation as well. A further gain from financial globalisation is the enhanced diversification of risk.

This is, in a nutshell, the market fundamentalist argument for capital market liberalisation that entails the belief that markets alone always work well. States should minimise regulation of capital markets and let the 'invisible hand' do its magic, according to market fanatics, and capital controls are a definite red flag. However, financial globalisation has not yet been a triumph of economic efficiency and redistribution. The next sections will explain how and why the reality observed differs from the expectation.

As usual with economic models, the underlying assumptions of financial globalisation theory fail to hold in the real world. Although capital is allowed to move freely across borders to gain the highest rate of return, this behaviour is not often observed. For example, researchers have recorded a home bias in trade and investment portfolios, a dependence of investment on national savings ('Feldstein-Horioka puzzle'), and a seeming failure of the interest arbitrage equation, among others. These findings make the idea of financial globalisation leading to consumption smoothing, investment efficiency, and risk lowering merely conjecture. Many of these economic 'puzzles' were documented before the recent episode of financial liberalisation. This makes one wonder, why supposedly well-informed institutions would urge financial integration in the first place with such uncertainties of results.

What then are the effects of financial globalisation? Commonly mentioned are high frequency of financial crises, unnecessarily high saving rates and loss of sovereignty in economic policy making. In effect these are all consequence of increased *instability* associated with financial globalisation which causes overall inefficiency in the global economy.

Instability is largely a consequence of the volatility of short-term capital flows. These capital flows are often speculative in nature, but can have an important role in developing economies. When capital flows in, nominal measures of economic activity skyrocket and prosperity pursues. But when investors, for one reason or another, panic and withdraw their assets, the resulting economic turbulence can have devastating effects, as seen in the Mexican 'Tequila crisis' of 1994 or the East Asian crisis of 1997. Capital flows are pro-cyclical, meaning that whenever an economy is strong, it generates con-

John Hudson

fidence in the country and its currency, attracting more capital. Whereas, when investors feel a country is showing signs of economic weakness, the financial market engages in 'hoarding behaviour', amplifying consumption volatility.

The first observable effect of economic instability is a sharp rise in the number of financial crises, which amount to about a hundred over the past thirty years. High capital volatility catalyses the occurrence of 'boom and bust' cycles. Recessions leave a prolonged mark on the economy in the form of depressed business and associated detrimental psychological effects such as those caused by unemployment.

From increased instability and its manifestation into economic crises follows an imbalance where emerging economies are buying rich countries' (notably the U.S.) treasury bonds to hedge against these new risks, supplying rich countries with cheap credit. Emerging economies are determined not to repeat the mistakes of the 1990s, by decreasing dependence on short-term capital flows. This requires the accumulation of foreign reserves. Countries prefer these reserves in the form of secure assets, such as U.S. Treasury bills, which while reducing risk, are costly. With a return rate of around 1% they have a huge opportunity cost. If emerging economies did not need to fear exchange rate fluctuation, they could invest more at home, likely to attain higher returns and contribute to economic development.

Financial markets affect politics, especially in developing countries. In a report by an IMF chief economist, Kenneth Rogoff and his colleagues see financial integration as introducing market discipline in government decision-making, committing them to "better economic policies". Otherwise, investors flee or will not invest in the first place. This statement displays an explicit market fundamentalist bias, assuming investors' perception of economic policy-making is superior to anyone else's. Nevertheless, policymakers in developing countries are dependent on market perception and will thus try to avoid policies that upset the markets, even if they are beneficial for their own citizens. Short-term capital tends to shy away from investment that does not yield direct, quick returns, so investment in human capital or infrastructure development becomes increasingly difficult. As a result, short-term capital market myopia is transferred to political decision-making.

Essentially instability in the global capital market diverts resources away from productive activities, as efforts are focused on risk management – far from a Pareto efficient outcome. The fact that short-term capital flows have detrimental effects on citizens not directly involved in the flows implies that there is an externality, which calls for intervention to correct the market equilibrium. Measures that stabilise capital flows whilst ensuring they move counter-cyclically and shift risk of exchange rate fluctuations on to those who can more easily afford to bear them could reduce the negative impacts of global capital market liberalisation. Even the IMF has now reversed their stand on capital controls and admitted the shortcomings of the previous economic recommendations.

The implications of this market fundamentalist defeat with respect to financial globalisation are potentially significant. However, it remains to be seen how much things will change in practice and whether controls on short-term capital movements become politically feasible. From a theoretical standpoint, financial globalisation has highlighted the inadequacy of dealing with economic issues from a purely market-centred perspective. Economics should not be about beating the drum for free markets at every instance, but about using resources optimally and increasing the welfare of society. Sometimes regulation, legislation and intervention are necessary to ensure we are not using our time, energy and materials for wasteful activity.

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Bootleg Booze: Prohibition in the 21st century

Andrea Schmidtová examines the impact of information asymmetries in the context of alcohol

Generally, it is believed that production and trading in competitive markets results in an efficient equilibrium. It is that all-pervading concept of the "invisible hand", coined in the 18th century by Adam Smith. The popular Atlantic view of government intervention is that it disrupts functioning markets, misallocates and wastes resources. However, there are many cases in which the competitive markets fail to remove inefficiencies, and their continued operation may result in serious economic and social losses; here government intervention is not simply justifiable, it is preferable.

A key driver of these Market Failures is asymmetric information. Explained by George Akerlof and his famous "Market for Lemons", this arises when one of the trading partners possesses superior knowledge when conducting a trade; he or she takes advantage of such position distorting the market. There is a huge number of real-world examples of such market failure; the most recent one is perhaps a case of methanol-tainted spirits in the Czech Republic. Driven by a vision of easy profits, a group of individuals got hold of cheap technical methanol which is freely available and normally used in industrial products such as antifreeze. Mixing it with ethanol, they counterfeited the labels and proceeded to sell it through the black market to a large number of stores and brands, mostly in recession-hit regions. What followed was a state of pure chaos in the Czech Republic and its neighbouring countries, as the count of deaths and severe health complications caused by methanol poisoning increased by the hour. As a result, the Czech government banned the sale of any spirits over 20% proof domestically, and following a European Union request, banned all exports of Czech-brewed spirits.

In theoretical terms, the spread of information about the dangers of these spirits would lower the demand and the prices would need to adjust downwards. To maintain their profitability, genuine producers of spirits would engage in signalling to convince their customers of the relative quality and safety of their products. However, with a high level of mistrust in the market, this process might take too long and falling prices could cause the market to unravel. The genuine producers would be pushed out of the market, leaving behind only those who can produce at that lowest cost base, i.e. the bootleggers. This is a basic case of Adverse Selection, precisely following Akerlof's argument regarding the fictitious market for lemons. From another perspective, consumers could engage in screening; testing particular brands and communicating the results among their peers to establish which producers are genuine. The problem with market solutions to the asymmetric information problem is not only their inefficiency

> "Government intervention is not simply economically justifiable, it is preferable"

and ineffectiveness; it is the time it takes them to develop. In reality, such delays would result in soaring economic and social losses. In blunt terms, in this scenario government intervention is required to create the circumstances in which the market will behave efficiently.

Initially, the government is no better informed than the general public. Its pivotal role stems from its domination of resources, position of authority, and the staffing of an operation on a nationwide scale. In the short-run response to a crisis it can instantly impose a ban on sales of relevant products, it can attempt to shut the bootleggers down, and it can attempt to help the public distinguish product qualities. As a result, government intervention can mitigate the economic and social losses both faster and more effectively than competitive market forces. The Czech government has implemented all of the mentioned policies; however there are many more to follow if the contaminated spirits are to be entirely removed from the market, and if the law must be changed to ensure that such situation won't happen again.

In the long-run, the government should apply an appropriate, revised incentive scheme in the form of legislation. Minimum quality requirements, enforced packaging restrictions and requirements, and the manipulation of producer behaviour through a credible threat of punishment for disobeying the law are all necessary to prevent reoccurrence. A number of experts have suggested implementing stricter laws similar to the American style of licensing production and sales of spirits; this would make it easier to track the products back to their source.

The popularity of home brewing is further complicates the affair, having previously been largely tolerated as long as the production is used for personal consumption only. The main danger of such activity is that it fuels the existence of a black market in spirits; in some regard it is creating a culture of circumventing the law. The official government figures state that spirits of such sources account for around 10% of the market, the unofficial figures, however, admit that the real percentage of bootleg booze is double that. This leaves the Czech government in a strange position, balancing their responsibility to protect the consumer from opportunistic producers against the public's wish to engage in the guilty practices on a small scale. To be absolutely in favour of one option involves completely disregarding the other.

This isn't the first case of methanol-tainted spirits and it will not be the last, this fact helps to frame the difficulty of the issue. As a case study, this example shows how many of our economic models rely on weak assumptions (such as symmetric information) which, when taken away, negate an efficient outcome. This example shows how government intervention in the economy can create the right starting point from which the 'market' can go on to achieve efficiency. It represents how, contrary to popular belief, government intervention is not simply economically justifiable, it is preferable.

Impending Fragilities in the Chinese Economy

Ian Billet asks whether Chinese economic growth is as inevitable as we once thought

Over the past 30 years China has experienced unmatched economic growth, sustaining GDP growth rates in excess of 9% year after year. The world has watched in awe as China has catapulted itself from a small centrally planned agrarian nation to the world's second biggest economy. However, a gradually changing global and domestic situation is exposing fragilities in a seemingly infallible economy. As it completes the transition from developing nation to a fully integrated member of the global economy, how the government reacts to the emerging challenges will determine the future of China.

> "The Chinese people have tolerated the nature of the regime in return for continued economic prosperity. However, this prosperity is waning, high growth rates are slowing and government policies to sustain them may harm future growth prospects"

Firstly it is useful to briefly understand how the Chinese economy grew, which can be explained simplistically using the Cobb-Douglas production function: Y=AL K . In 1978 Deng Xiaoping gradually started to dismantle the communist system of state planning and collectivisation in favour of progressive economic reforms that opened China to international trade and liberated the work force. Labour (L): China has seen the largest single human migration in history. 160 million peasants migrated to the relatively high-wage manufacturing industry in coastal areas. This provided an abundance of cheap unskilled labour that allowed firms to seriously reduce production costs. Capital (K): The combination of cheap labour and government efforts to improve infrastructure created the perfect investment environment; from the early 1990s onwards Foreign Direct Investment (FDI) began pouring into China. According to the World Bank, the net inflow of FDI rose from $3.5Bn in 1990 to a high of $175.1Bn in 2008. In addition China has seen a consistently high savings rate, useful to a growing economy, a rate that has not dipped below 30% since 1978, reaching over 50% in 2005 . The final key component is Total Factor Productivity (A). The Chinese had instant access to modern technology, maximizing the efficiency of their capital and labour. This is known as the 'leap frog effect' as the Chinese skipped many stages in technological progress. As the Cobb-Douglas production function shows, vast amounts of cheap labour, capital and modern technology allowed China's economy to increase at spectacular rates year on year. However, the favourable conditions that existed at the start of China's growth no longer exist and fragilities are beginning to show. How China tackles these issues will dictate how it continues to integrate into the global economy.

In recent years, two potentially growth-inhibiting trends have developed in China. Firstly, the rural-urban wage gap is narrowing, causing a slowdown in the number of workers migrating to industrialised areas. This decreasing supply of labour pushes up wages, increasing the costs of production for urban firms. The days of limitless cheap labour are over and China has already begun to lose low-skilled manufacturing jobs to countries like Bangladesh and Vietnam. According to The Economist, the percentage of total FDI invested in the secondary industry dropped from 70% in 2004, to 45% in 2010, thus despite recent growth figures there is declining interest in the manufacturing industry. Manufacturing is essential for Chinese economic growth and a slowdown in investment may signal the need for a change of strategy. Secondly, China is undergoing one of the largest demographic changes in history. As the generation that prospered under Deng Xiaoping begins to retire, the effects of the one-child policy are beginning to show. The UN predicts that the median age of Chinese citizens will increase from 34.5 in 2010 to 48.7 in 2050, constituting a change of +17.4% in the over 65s and -11.4% in 15-64s. The total workforce will contract causing labour shortages and putting more pressure on an already strained economy. Furthermore, the inadequate social security net will force working age people to bear the financial burden of caring for increasing numbers of pensioners. This change in demographics threatens to reduce economic growth and increase existing social malaise, potentially undermining the legitimacy of a leadership currently in a delicate transition process.

It is not only domestic changes which have the potential to slow growth; China's reliance on manufacturing exports leave her exposed to the volatility of world markets. As the ripples of the financial crisis were felt in Asia, Chinese GDP growth rate dropped from 14.2% in 2007 to 9.2% in 2009 and 20 million migrant workers were layed off. The Chinese government introduced expansionary monetary policies and quantitative easing. Interest rates were cut by 1% to 5.6%, the largest single reduction in China's history. A stimulus package of 4Trn RMB (£400Bn) was implemented, 1.5Trn (£150Bn) of which was to be spent on infrastructure projects. These measures were not to prevent negative growth or a banking collapse but to sustain 10% GDP rates and they have come at a cost. Cheap money helped inflate a massive property bubble, similar to Japan in the 1990's and the US in the 2000's, creating the infamous 'ghost towns' – areas of 100,000 apartments with no occupants or buyers. These ghost towns symbolize the dangers of a political system, which solves short-term problems with measures that potentially have longer-term consequences, something that could have disastrous effects for both the economy and the leadership.

In a 1994 article, Vince Cable described China's "virtuous circle of mutually reinforcing economic success and political stability", the cracks in this virtuous cycle are beginning to show. The Chinese people have tolerated the nature of the regime in return for continued economic prosperity. As 224 million people were lifted from poverty they were too preoccupied with improving their own lives to take grievance with the political system. However, this prosperity is waning, high growth rates are slowing and government policies to sustain them may harm future growth prospects. China is also beset by many social problems; the rigid Hukou system has deprived millions of rural immigrants in urban areas of basic provisions such as schooling and health care. Endemic corruption is a serious issue in modern China. It creates massive barriers to economic efficiency and has provoked civil unrest among the people; it was a main theme in the 1989 Tiananmen Protests. As China makes the transition from developing to developed nation, a slowdown in growth rates is inevitable; eroding the foundations of political legitimacy. If the government does not fully recognize this and adjust economic and social policy accordingly, the virtuous cycle of growth and stability could very easily become a vicious cycle of contraction and instability.

China is still growing and will continue to do so for the foreseeable future, however, emerging weaknesses in this tightly controlled system have the potential to derail the progress that has been made so far. She needs to develop a more sustainable growth path, reducing her reliance on manufacturing exports - in which she is losing her comparative advantage. There is hope for growth from domestic consumption, which is projected to be 20Trn RMB in 2025 (£2Bn) - five times the stimulus package during the financial crisis. Furthermore, social problems associated with the impending demography crisis will need to be tackled to prevent widespread political discontent. With declining rates of economic growth beginning to undermine political legitimacy and social malaise becoming increasingly apparent, the next 20 years will prove critical to the future of Chinese development.

Rachel Hill

Austerity in the Baltic States: Success or Failure?

Lukas Lastas discusses the lessons from austerity measures in the Baltic States

Austerity is a term used to describe policies which rely on strict government spending cuts and reduced public benefits. Despite recent public attention being on Southern European States, austerity measures were also implemented in the Baltic States, namely, Lithuania, Latvia and Estonia. All of them were hit by the worst recession in Europe, however they have managed to recover quickly since, leading to claims about how austerity measures were exemplary in the Baltic States and extricated them from economic hardship. But how well can the experience of the Baltic States serve as a model for other countries in crisis?

In the years preceding 2007, Latvia, Lithuania and Estonia were referred to as the "Baltic Tigers". They experienced enormous 10% growth in 2006-2007, attracted high levels of foreign investment and maintained relatively low government spending – less than 40% of GDP. However, in the following two years Lithuania, Latvia and Estonia suffered a fall in GDP of 17%, 25% and 20%, respectively.

Due to their high balance of payment deficits, the Baltic States nearly faced external devaluation in 2008. For instance, the IMF requested devaluation in Latvia at the time, yet austerity was preferred. The EU opposed the devaluation due to the possibility of a "contagion"; the Swedish banks operating in Latvia were afraid of becoming vulnerable, while the government fostered a desire to join the Eurozone and maintain the country's competitiveness. While Lithuania and Latvia retained their currencies pegged to the Euro, Estonia became the Eurozone member in 2011. Devaluation in 2008 would have ruined any possibility of achieving this.

Thus, the Baltic States chose 'internal devaluation' or, in other words, austerity programmes. They prevented devaluation of their currencies at the cost of wage cuts and reduction in government spending by 8-9% of GDP. It is often claimed that aggressive austerity measures boosted the economy, which is now rising up to the levels of pre-2008. Last year, Lithuania, Latvia and Estonia experienced an average economic growth of 5.9%, 5.5% and 7.6%, respectively. Moreover, during 2007-2011, the countries experienced a 60% rise in productivity. Now, besides having their credit ratings improved, they are actively participating in the international financial markets. While consumer spending is rising, the countries continue to attract investment and are expected to improve productivity even further.

Government officials in all three countries declare that intervention in the name of austerity was the right response to the European debt crisis. They acknowledge that citizens were disappointed with the austerity measures taken in 2009, when European countries were applying fiscal stimulus. Now, the countries of Southern Europe still confront similar problems, which have grown exponentially since. The resulting evidence in the so called "Baltic model" has encouraged the EU to advocate austerity as a solution to problems in Greece and Spain. Christine Lagarde, the Managing Director of the IMF, praised Latvia for its strict austerity policies and impressive economic recovery, thus implying that quick and positive results follow austerity. The success has been attributed to Latvia's determination to suffer for a relatively short period of time rather than spreading the burden over a longer time horizon.

> "Austerity measures were implemented in the Baltic States, namely, Lithuania, Latvia and Estonia. All of them were hit by the worst recession in Europe, however they have managed to recover quickly since, leading to claims about how austerity measures were exemplary in the Baltic States and extricated them from economic hardship"

However, this superficial analysis is both simplistic and irresponsible. Despite seeming successful on the surface, austerity brought enormous social costs. The most painful effects of austerity in the Baltic States are reflected currently by a high level of unemployment of 15%, which peaked at 30% in 2010. Moreover, real wages have been reduced by 15%, health benefits were cut, taxes increased, and the retirement age has been raised. Finally, considering the 25% contraction of the economy, the 5% average growth does not seem to be enough for a quick and safe recovery.

That said, widespread protests, such as witnessed in Greece and Spain, were not sparked in the Baltic States. This has been put down to a range of factors, including the patience and rationality of people, flexibility in business and labour market, high political culture and rapid government response to the crisis. Another suggested explanation is that people remember even worse economic times under Soviet rule; growing potatoes in the back garden, queuing up for bananas or toilet paper in stores are just a few examples of difficult Soviet times. Furthermore, in recent years austerity has contributed to a massive migration from the Baltic States. Their rate is the highest in the EU, and while it helps to reduce the unemployment within these countries, in the long-term the prospects are worrying. The migration has been explained as an alternative to protests: instead of taking to the streets, people simply leave these countries.

The success of austerity measures in the Baltic States is debatable, as it is thought that achievements there could be attributed to the Scandinavian neighbours, relatively unharmed by the financial crisis. Close ties among countries led to the growth in trade and technology transfer, which accelerated the spill-over of economic recovery in the region. In addition, while being small open economies, Lithuania, Latvia and Estonia are highly globalized in terms of exporting and the financial sector, which implies their strong dependence on the larger neighbours' overall economic performance. Thus, austerity may have played a smaller role in recovery than fortuitous geographical situation.

Paul Krugman, the Nobel Prize winner in Economics, has been an active participant in the debates surrounding the effectiveness of the austerity measures in the Baltic States. While he argues that the crisis developed due to the lack of demand, and austerity has never been successful in dealing with recessions, the experience of the Baltic States undermines his argument. Paul Krugman has provoked the ire of Estonia's President Toomas Hendrik after publicly claiming that the country resembles "the poster child for austerity defenders", to which he responded that the economist is "smug, overbearing and patronizing". This dispute demonstrates two distinct approaches, which indicate an intrinsic division in the theoretical and real-life representation of austerity. Krugman assumes that public debt can always be dealt with fiscal stimulus and ignores the threat that debt can become excessive, whereas the Baltic States contrarily focused on overcoming the latter issue. Hence, the reason why Krugman repudiated the success story of Estonia is that it threatens his analysis of the whole financial crisis.

However, it is hard to compare the case of the Baltic States with Eurozone countries, such as Greece. During the recession, Estonia received funding from the EU, which constituted around 20% of its budget. Moreover, Latvia was injected with the EU and IMF 7.5 billion euro bailout package, which comprised around a third of country's GDP. It also had very little debt pre-crisis, which was around 9% of GDP by 2007. This was greatly surpassed by Greece's debt at that time being 109% of its GDP. Reflecting on these numbers, it can be concluded that it was impossible for any country in Southern Europe to receive an equivalent package. Also, the banking system in the Baltic States is predominantly Scandinavian. During the crisis, none of these banks failed, which kept the financial system relatively stable, which has not been true for Greece, where hoards of risk averse depositors withdrew their savings, causing the flight of capital.

While it is believed that austerity measures were implemented successfully in the Baltic States, the unique features of the region are routinely ignored. Even though the three countries have avoided devaluation and rejuvenated their economies, it is far from clear that these successes can be replicated elsewhere. The advantageous geographical situation and well-integrated export sectors contributed to the economic recovery, as we need to consider the role of prosperous neighbours, which did not experience recession to a large extent. Also, austerity led to enormous emigration from the Baltic States, which could bear serious negative effects for the economy in the long-term. Finally, Lithuania and Latvia have taken advantage of funds received from the EU, which would be inadequate for highly indebted countries.

Thus, the success of austerity measures is not clear-cut in the Baltic States as it seems at first glance. It can be concluded that the Baltic States constitute a unique pro-austerity example, which demonstrates multipartite results and may not be reproducible in the context of the European Union.

The 'Special Category' States of India

Vivek Chamling reports on the Indian government's attempts to promote growth

Under India's system of federal governance, the country is divided into states which have their own individual governments. While many of these state governments have ample financial resources to function independently, some lack these resources and depend on the central government for financial assistance. These state governments are unable to improve their fiscal position independently and are reliant on the central government for development funds. This financial difference in the distribution of central resources has led to these states being characterized as 'Special Category' states. The Finance Commission defines 'Special Category' states as those that have "hilly terrain, sparsely populated habitation and high transport costs leading to high delivery cost of public services."

Out of the twenty eight states of India, eleven qualify for 'Special Category' status and are located along the Himalayan range. In these regions, natural disasters such as landslides are frequent and the terrain is harsh. As a result, there are frequent disruptions to the economy which in turn has affected investment in these regions.

In order to ensure that the Special Category states have the opportunity to develop to the level of other states, the centre intervenes and provides financial assistance. It transfers resources to the states through various avenues such as a larger share in central taxes and grants for development.

This ensures that these states maintain sound public finances and have resources for development.

These resources constitute a major part of the Special Category states' output. Each year, the central government also statutorily releases funds to the states for the five year plans of the nation. It was not until the last few decades that plans began to shift towards capacity building of workforce and infrastructural development and, as a result, employment opportunities are being created in these areas and the workforce are better informed. The shift in focus has been necessary to ameliorate problems such as low tax revenues, poor infrastructural development and rapid increase in the expenditure for development purposes. By investing in the plans, however, state governments forsake the opportunity to invest in schemes that are representative of their population to a greater extent.

The weak public finances of Special Category States can be traced back to the time of independence. At the advent of economic planning in India, in 1947, the Soviet system was a major influence. The public sector was vastly endorsed and expanded and public monopolies were formed. Soon after, problems started to emerge forcing the policymakers into rethinking their strategy.

The central and state governments, due to the nation's Fabian-Socialist policies, had a balance of payment crisis towards the end of the 1980s. It was around the same time that India adopted macroeconomic planning and abandoned micromanagement. The crisis was a major setback in the attempts of the Special Category states to improve their fiscal performance to par with the other states. In response to the crisis, economic liberalisation reforms were undertaken in the 1990s and only then did the fiscal performance of these states start to improve.

Following the reforms, the Finance Commission was delegated with the task of forecasting and setting fiscal targets for the states. It succeeded in decreasing debt levels and lowering deficits. More recently, in 2005, the Debt Consolidation and Relief Facility (DCRF) scheme has also been adopted by the state governments. The scheme provides debt relief and debt waiver based on fiscal performance and has reduced the interest payment expenditures of Special Category states. Thus, the states are now improving their fiscal performance and have also started investing in capacity building schemes.

The centre still has a role to play in ensuring fiscal discipline and sustainability of state policies. These policies have succeeded in checking the debt levels and deficits however, the Special Category states are still reliant on the centre, because revenue streams are still insufficient for autonomy. In addition to the financial problems, most of these states are either struggling with insurgency or social unrest.
In these regions along the Himalayas, there is an abundance of natural resources and some states have successfully attracted and profited from investment. Although most of the natural resources remain untouched, investors refrain from these regions unless they have a huge incentive, which has induced many state governments to introduce investor friendly policies such as tax exemption and subsidies.

In this effort to expand the resource base and increase government revenues, the central government continues to play a major role. Both the state and the central governments enjoy a considerable amount of discretion which makes monitoring by a single body difficult, if not impossible. In terms of the use of financial assistance, the boundary between development expenditure and general expenditure is somewhat blurry. The development expenditure switches to general expenditure after the completion of the project at hand. Hence the future of the states is now dependent on how well their state governments are able to utilize the given resources

The Spoils of War

David Baron considers the motivations for interventions in the Middle East

Over the past few decades, tensions in the Middle East have sporadically erupted into full-scale civil wars, which have sometimes led to foreign political intervention. Obviously when taking action, governments must balance the cost of invasion with its benefits. Motivations for such intervention vary, may differ from reasons publicly advanced by governments, and could be for purely economic considerations. We will consider some recent case studies.

The officially stated motives for direct military intervention in Iraq can be seen as ambiguous. Following the infamous September 11th attacks, President George W. Bush led calls for action upon the terrorist group Al Qaeda, who possessed alleged links to Saddam Hussein's regime. This motivation, accompanied by a desire to confiscate Weapons of Mass Destruction that were being apparently developed, led to a declaration of war upon Iraq, with various Western nations-including the U.S., UK, and Australia-invading the country on 19th March 2003. Here, intervention was arguably swift and direct, constituting a foreign military force that clashed repeatedly with the Iraqi army. However, continued lack of any verifiable evidence for WMDs has cast serious doubts over the true motivation for intervention in Iraq.

Furthermore, the idea that oil remained a reason for direct intervention in Iraq is mooted by some. Fears of instability within the Middle East, and the effect this would have on global oil prices, were triggered by Saddam's invasion of Kuwait in 1990 as Kuwait and Iraq combined possessed around 20% of world oil reserves. Exacerbating concerns, Saddam had previously attempted to coerce other oil-producing nations into reducing their oil output so as to raise prices; his purpose for doing this was to increase the country's revenue, in order to repay the large war debt owed to Kuwait that had been accumulated whilst fighting neighbouring Iran during the First Persian Gulf War in the 1980s.

Oil may also be a motive in the recent intervention by Western forces in the Libyan people's revolution against the dictator Muammar Gaddafi. Due to Libya's fractured nature, with different tribes controlling certain regions, some oil-producing districts were effectively cut off during the fighting, causing Libya's oil production to fall by two-thirds. These oil reserves proved influential during the conflict, with each side attempting to capture inland oil fields alongside coastal settlements. The consequent drop in oil production caused global price rises, which would have particularly affected European states as 85% of Libya's oil was exported to Europe before the civil war. Therefore, this suggests that European members of the coalition had a vested interest in guaranteeing Libya's stability, so as to restore oil production and subsequently export levels back to their pre-civil war levels. Hence, does this not provide some Western states with a self-serving motivation to directly intervene in Libya's domestic conflict?

Yet should we be this cynical? Whilst some nations have directly intervened in the affairs of other countries, perhaps for reasons less altruistic than we are led to believe, such as guaranteeing access to oil reserves in both Iraq and Libya, not all examples of intervention are as dubious or invasive. For example, let us consider the possible full-scale civil war facing Syria, and the indirect interventions made by foreign powers. Firstly, in a sign of true diplomacy, the Arab League conducted an observer mission within Syria at the end of 2011, in an attempt to ascertain the true extent of the conflict. Also, various states have imposed economic sanctions upon Bashar al-Assad's regime. Furthermore, the US, UK and France have all provided non-lethal military aid such as medical supplies to the rebels.

Unfortunately, these attempts at indirect intervention within Syria have all been criticised. The Arab League observer mission appeared to show little knowledge of the ongoing fighting between the pro-Assad forces and Syrian rebels, which attracted scorn from many. Secondly, despite a concerted effort from various nations to place economic sanctions upon Syria, there is little evidence that shows this form of indirect, economic intervention has forced Assad's oppressive regime to engage in serious reform. Exacerbating this is the inability for all states to prevent arms and other lethal products from flooding the Syrian market, a dark facet of the economics of war. In fact, some have supplied weapons directly to the pro-Assad regime for profit, and to bolster the ruling elite's grip upon the country; for example, Russia has continued to honour its contract with President Assad to deliver arms, with the deal being worth an estimated $1.5bn.

Despite these criticisms, intervention in the Syrian civil war from the majority of states appears to be indirect, and more diplomatic than in previous cases. Therefore, this begs the question: why is the West not intervening directly in Syria's affairs? Is it because the West has considered the wishes of those in the Middle East? This idea could be symbolised by the words of the former Syrian general Manaf Tlass, who defected in July 2012, and claimed that the "Syrian people are capable of freeing themselves. We don't want to be freed by France or the USA or any other country". Or is it that there is less economic incentive to invade Syria, and so the political costs would be too high?

Maisie Shearring

Clearing the Path to Destruction

Jason Lai discusses the dangers of regulators' attempts to deal with the global financial crisis

It has been four years since the world felt the devastating effects of the greatest global financial crisis. Since then, financial regulators have proposed to put more derivative transactions through clearing houses to ensure this catastrophe never happens again. But there is reason to suggest this will simultaneously create a new problem. To quote Ben Bernanke, Chairman of the US Federal Reserve: "if you put all your eggs in one basket, you better watch that basket".

Clearing houses ensure that once a financial transaction has been agreed between two parties it will be honoured, even if one of the parties default. Specifically they provide central counterparty clearing (CCP) services, whereby they act as the "middleman" of a transaction by becoming the seller to the buyer, and the buyer to the seller. This process is called "novation", where the clearing house essentially assumes the counterparty risk when two organisations trade. They manage this risk by: issuing margin calls whenever the financial condition of a party has deteriorated; and holding collateral from both the seller and the buyer of the transaction, which is then used as reimbursement should a default ever occur.

Before the financial crisis, clearing houses were considered to be the mundane part of finance – the plumbing that goes on behind-the-scenes within the financial system. However proposals in both the Dodd-Frank Act and the European Market Infrastructure Regulation (EMIR), mandating that eligible derivatives must be cleared centrally through clearing houses, have pushed clearing houses into the spotlight. The biggest target is the over-the-counter (OTC) derivatives products, estimated to be around $700 trillion as of June 2011. To put things into perspective, this a lot larger than the $83 trillion of derivatives currently traded on exchanges.

These proposals are designed to mitigate the uncertainty and risks associated with the default of a large trading firm. This would force firms trading in standardised derivatives to use clearing houses. Recent evidence from the 2008 financial crisis provides some compelling evidence of the potential benefits of this. When the interbank markets froze due to the banks unwillingness to lend to each other (since they were unsure what risks the others were carrying on their balance sheet), clearing houses had a much clearer idea of their exposures. They were able to react to the situation a lot quicker by demanding more cash or other collateral from other counterparties. Another example is that Lehman's trading positions in markets that used clearing houses were sorted out within a matter of days. Those in non-cleared markets took months, if not years. However, a huge increase in the volume of derivative transactions going through clearing houses will have some interesting consequences.

By forcing more over-the-counter (OTC) transactions through clearing houses the demand for clearing houses will increase, attracting new players to this lucrative growth industry. The London Stock Exchange's recent acquisition of LCH.Clearnet, the world's leading clearing house, is an example of an industry wide-dash for a slice of the action. The increase in competition within the industry carries the risk that clearing houses will reduce the amount of margin that they demand – in order to win deals and rake in higher fees.

Most important however, is the issue of systemic failure should a clearing house get into difficulties. By clearing more transactions, clearing houses will fundamentally become more interconnected with the financial system, and in the event of a financial crisis, may require a bailout. The danger we face is not whether central banks are willing to step in and become a lender of last resort, but whether they will be able to afford to do so. With balance sheets already bloated from the various rounds of quantitative easing, central banks will find it increasingly difficult to prop up systemic institutions such as clearing houses, if they force $83 trillion worth of OTC derivative transactions to be cleared.

A more dangerous prospect is if clearing houses succumb to moral hazard and operate their business under the assumption that central banks will "bail them out". This has already happened in recent years. In 1974, the Caisse de Liquidation went bust due to defaults on margin calls when the price of sugar-futures fell sharply. The same occurred in 1983 when the Kuala Lumpur Commodities Clearing House collapsed after half a dozen large brokers defaulted when the price of palm-oil futures fell. However, the most dramatic example was the failure of the Hong Kong Futures Exchange Clearing House in the wake of the global stock market crash in 1987. It was dramatic because the Futures Exchange was forced to close, which meant that traders faced margin calls on their cash positions. But with the futures market closed and the clearing house bust, they were unable to get their margin monies returned on their profitable positions. In the end it took a government bailout and the closure of the stock market to return to normality.

Regulators face a difficult challenge. Deciding to force more derivative transactions through clearing houses may potentially create another "too-big-to-fail" problem. Paul Tucker, Deputy Governor of the Bank of England raised the key issue of how one can manage the default of a clearing member, and ergo the clearing house, by ensuring central counterparty services can be maintained while also minimising disruption and value destruction. Clearing more transactions is not the simple quick-fix solution we are led to believe. In order to avoid potentially catastrophic consequences, a possible solution would be to create a single global, not-for-profit clearing house, backed by all the central banks. This would earmark clearing as a vital component of the financial system that is too important to be left in the hands of the private sector. But it remains doubtful whether there exists the political appetite necessary to accomplish this and the international co-operation required from the world's central banks to backstop, what is potentially trillions of dollars worth of derivative transactions. One thing is for certain. Regulators should tread with caution, before they unwittingly sow the seeds of the next financial crisis.

Holly Bishop

Comment

Chasing Horizons

Claire Riedel investigates the tricky science of forecasting

M J Mundy

How is it that after hundreds of years of studying economics we still are unable to successfully predict, and therefore prevent, recessions or economic downturns? Do we lack sufficient data, or is there something inadequate about our method of study? I believe it is the latter. Economics is fundamentally a study of human behaviour and interactions yet, today, economics is taught as a science using a series of models that are only effective when necessary assumptions are satisfied. There seem to be two main problems with this approach. The first is a matter of temporal relevance and applicability, and the second is our reliance on concepts of rationality and equilibrium.

An education in economics is founded upon supply and demand curves, marginal benefits/costs, utility, equilibrium and rationality. To the average economics student these words seem to constitute their very being. They are the references to which economists continually return. However these concepts have become crutches for economists, instead of guidelines for thinking about the human interactions that dictate the ebbs and flows of an economy. In the classroom, students are taught and re-taught a series of economic models for a varying number of firms and markets for which there are optimal equilibria, which maximize the utility for rational actors. As an economics student myself, I have struggled to find a distinct connection between these models and the "real world". The assumptions and predictions outlined by these models fall short in their applicability to today's volatile, globalized economy. As Joseph Schumpeter writes in his book, *Capitalism, Socialism, and Democracy*, "In capitalist reality as distinguished from its textbook picture it is not […] competition within a rigid pattern of invariant conditions, methods of production and forms of industrial organization […] but the competition from the new commodity, the new technology […] which counts".

Schumpeter's concentration on novelty leads me to my first criticism of orthodox economics: we do not sufficiently account for change. The aim of orthodox economics is to obtain an equilibrium in which the quantity supplied is perfectly equal to the quantity demanded and both agents are maximizing their utility given their constraints. However, a model in which the ultimate goal is to reach equilibrium must exist in a world free of change because once it is achieved, "a more or less stationary state would ensue. Capitalism, being essentially an evolutionary process, would become atrophic". This is the key paradox. How can we rely on models which encourage and predict a "stationary state" when we know, as human beings, that the world is constantly changing and never the same? Orthodox economics attempts a static and mathematical approach to a sociological subject and for this reason is often unsuccessful in its predictions. Furthermore, an examination of human behaviour, which is precisely what economics is, must account for the volatility of human nature; otherwise such an endeavour is ultimately futile. In this regard, are we chasing the horizon by trying to predict the unpredictable?

Not only do these models fail to account for volatility, the defining feature of economics, but also they collapse in their functional application for predicting future downturns because they unavoidably lack temporal relevance. The only data with which we have to construct these models is past data; however, this is insufficient given the rate of change in today's economies, galvanized by the disruptive impact of technology. Our models and therefore our assumptions and predictions can only be applied to past data because they are only pertinent to past experiences. In Schumpeter's words, "it is not possible to explain economic change by previous economic conditions alone. For the economic state of a people does not emerge simply from the preceding economic conditions, but only from the preceding total situation". Therefore, we cannot rely entirely on these models to effectively predict future behaviour, as the economics of today will always differ from the economics of yesterday. This dynamic quality is one of the most beautiful and challenging aspects of our global economy.

Entrepreneurs are often the agents of explosive change and their impact has frequently been neglected by orthodox economics. As Stan Metcalfe, a well-known UK economist and professor, argues, "Economic theory and the entrepreneur have never made easy traveling companions" .So as long as there are needs, and people to create new combinations from old knowledge as dictated by these needs, we will exist within a capricious, entrepreneurial economy. The role the entrepreneur plays in economics is unquantifiable, thus incoherent with an education in economics. They serve as the engine that drives our economy and are the very manifestation of the volatility inherent in human behaviour. Imagine where we would be without the Henry Fords, Bill Gateses, Steve Jobs of the world. They are unique to our economy in that they specialize in the dark business of destroying the old and popularizing the new; they break apart the system while simultaneously building a new part of it. In this regard entrepreneurs, along with natural tendencies of human behaviour toward change, protect the integrity of our system by continually stimulating economic advancement.

Finally, the level of importance rationality holds in orthodox economics is too great given the flexibility of the concept. When we study economics the term "rationality" arises often. We speak of rational actors, rational expectations and rational decisions. Most scenarios often assume rationality. But what does it mean to behave rationally? The concept of rationality has been constructed and moulded over the course of history in accordance with social norms. We have determined what constitutes rational behaviour and what does not. Herein lies another paradox. We have constructed these models that assume rationality, which we have also constructed from past data of human behaviour. However, how can we be sure that rational behaviour in 50 years will be the same as rational behaviour 100 years ago? Does this concept then, the purported heart of these models, collapse along with them?

Today's education in economics, as it relates to orthodox economics, is inherently flawed as it too often ignores economics' intimate relationship with human behaviour, and thus volatility. If we accept the volatility of human behaviour, we must accept the precariousness of economics. Therefore, we must put as much faith in the economic models as we would any models that predict human behaviour. In the words of John Keynes, we are animal spirits and it is this fickle spirit that drives economics. I am not, however, contending that we should disregard these models completely. They make important discoveries in regards to our economic history but a lowering of our expectations, in terms of how these models predict future economic events, would be fruitful in limiting the damage caused from an overreliance on systems that are inherently flawed and are routinely faulty in their predictions. Let us stop trying to contain the beast with structure and, in turn, marvel in its creative destruction.

Spain's Economy: Where It Stands, For Now...

Iain Harper looks at the current state of the Spanish economy

So, what is the situation with the Spanish economy currently? Unfortunately for the central government, it appears to be getting ever more dubious. Questions about how to balance the deficit, enact much needed labour market reforms, and rescue a flailing banking sector have helped drive both international speculation and domestic uncertainty. Teetering on the edge of a vicious circle of austerity, debt, and deficit the Spanish government and its Prime Minister Rajoy are coming under intense scrutiny. How to guide the economy back onto its feet whilst trying to maintain some form of democratic mandate?

Since the 2008 global financial crisis, Spain's healthy economy of balanced budgets and a desirable unemployment rate (7.9% in 2007) has taken an adverse turn. The booming property industry saw hefty stamp duty and tax revenues from immigrant construction workers supplement public spending on excessive new transport links and infrastructure. However, when the bubble burst and there was a 33% plunge in house prices, many a sizeable loan simply defaulted. This has left the banks in an uncomfortable position; with very high leverage ratios they funded most of their loans through international financial markets, ignoring the 'usual' civilian account deposits. This was a giant bet balanced on the assumption of sustained long-term growth. A bailout is now needed to fill this hole, and delays will only make it more costly as markets are losing faith in Spain. This is highlighted by Standard & Poor's downgrading of Spain's credit rating to BBB-, leading to market interest rates of 5.3%, as opposed to Germany's 1.2%. And whilst lenders were previously demanding interest at 7.6%, this temporary drop in rates is more a short-term effect of recent austerity measures; not a reflection of any easing of Spain's medium-term problems. Further exacerbating the issue are civilians now transferring savings to less risky banks in neighbouring countries. How can you re-capitalise when what little you had is draining away? Independent audits have concluded that Spain will require around £60 billion in order to keep her banking system afloat.

Pressure has also come over unemployment. Standing at approximately 25% for the general population, and the youth rate at an alarming 50%, Spain holds some of the worst figures in Europe. Many of the latter, known as 'Indignados', include students who graduate in the next few years without any job prospects. They've joined over a million other Spaniards in public protest across Madrid over the current round of austerity measures, a move replicated by civilians in neighbouring Portugal after their 2013 draft budget was revealed. There are also the regional governments to consider. During healthier times regions were almost self-sufficient, funding local public spending with regionally imposed income taxes. At that time regions only relied on central government for 20% of their total public spending. Now however, tax revenues have dropped significantly due to unemployment: they are experiencing a major shortfall. This all adds to put yet more strain on the central public purse.

Spain would be the fourth nation to require a major Eurozone bailout after Greece, Portugal and the Republic of Ireland; although the Spanish Economic Minister Luis De Guindos claims there is no need for one. The European Financial Stability Facility and European Stability Mechanism have predicted otherwise; having put £100 billion aside for Spain to call on if needed. This package has attached what they euphemistically call 'conditionality'. If Spain accepts, it agrees to strict tax increases, spending cuts, labour market reforms (such as halting salaries increasing with inflation), and quarterly financial report inspection by Troika (EC, ECB and IMF) auditors. Accepting this deal will undoubtedly lead to further public unrest, but what if Spain is only delaying the inevitable by not accepting the package now? This is an important question to consider.

Rajoy faces intense scrutiny right now. Having proposed lowering the deficit from 8.5% to 6.3% over the next year, he plans to cut spending on public sector wages, healthcare and education. Despite this target having already being revised upwards, it is still expected to be missed. As mentioned earlier, strict spending cuts on public sector wages risk further declines in tax revenue and a bigger demand for social benefits. Yet if the Spanish leadership agree to the condition-ridden bailout package they lose fiscal autonomy, accept they have lost control over the country's economy, and will lose large swathes of their electoral support. One thing that Spain has going for it is the interconnectedness of this crisis; Spain's problems are part of a bigger picture in the Eurozone, and the Troika will be unwilling to leave them out in the cold.

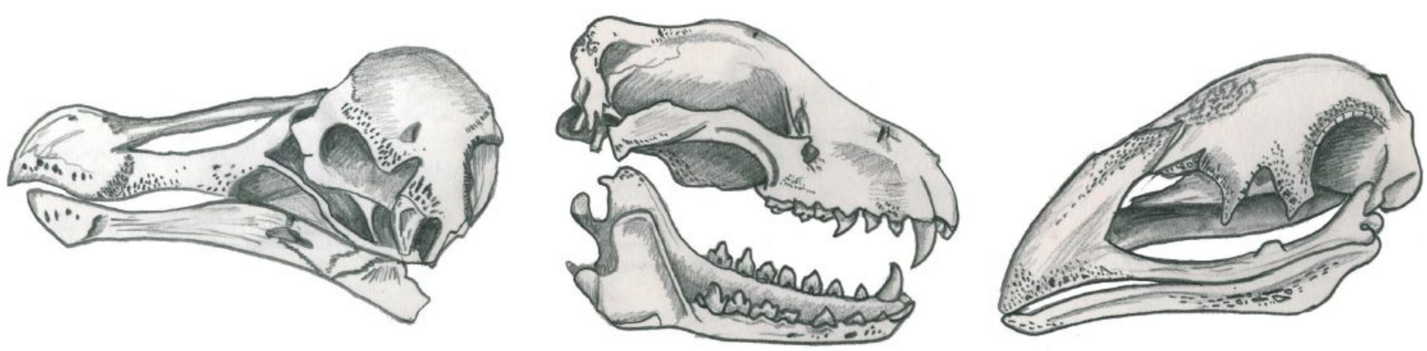
Whatever choices are made, the Spanish people face a rough twelve months ahead of them.

The Economics of Extinction

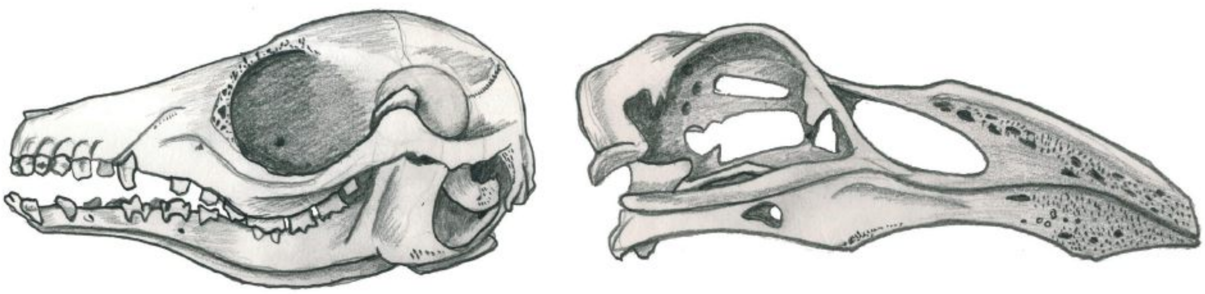
Clem Manger argues for a re-assessment of conservation efforts

This year saw another auspicious addition to the ranks of family cinema; *Big Miracle*, the heart-warming tale of several juxtaposed factions putting aside their differences to save a trio of whales from under a sheet of pack ice in Alaska. Despite being based on true events (obviously people couldn't write gold-dust like this) departures from the facts soon become apparent. The President gets involved on a personal level, Alaska seems unspoiled and even the oil guys are presented as having souls. Reading around the actual event this Hollywood-izing is necessary given that the reaction, which occurred in the 1980s and was dubbed "Operation Breakthrough", seems as bizarre as it was ineffectual. The international effort is thought to have cost in excess of one million dollars and the life of one of the whales that cut itself on jagged ice, panicked by the swarm of journalists that had gathered around the exit path. It has also since been suggested that these whales weren't even in very much danger and could have waited it out until the spring thaw.

Conservationism is the name of the doctrine which pursues efforts to prevent animal populations dwindling and I use this example above to demonstrate that conservation efforts sometimes suffer from an inability to disentangle our own very human affection for living beings from a clear and well thought out plan. As economists we pride ourselves on dispassionate well thought out plans and so maybe the time has come for a reconciliation between Economics and Conservationism, but this would be difficult. A key tenant of Conservationism is that all species from bacterial to our more siz-



Alice Molly Livingstone



able level, in a word biodiversity, have innate value and it falls to us as sentient and intelligent to protect this value or at least do it no harm ourselves. This is hard to describe with economic tools as 'Innate value' is vague and open to interpretation; clearly not ideal for the construction of a theory and model that can be tested. In order to tackle this issue one assumption is necessary- that whatever this 'Innate Value' may be, it is equal across all species. From this it follows that the ultimate goal of all conservation efforts should be to protect biodiversity as a whole and that charities etc that target a particular animal do so given that other species are protected in equal measure elsewhere. One would hope this is the case as subjectively placing the importance of one species over another could be misinterpreted and lead to disastrous outcomes. Obviously it is large complex life that is the most fragile and in need of our protection, especially in cases where human activity has contributed to the decline.

With this main assumption in mind, a number of contradictions soon become apparent. It is select charismatic species that become the spearheads of costly conservation schemes. The World Bank has just become the main donor of one such scheme that will run until 2022 with tigers as it's concern and we in Edinburgh recently became the proud patrons of two pandas for the humble investment of £0.7million per year in housing costs and 'hosting' duties to China. Efforts to save tigers and giant pandas produce mixed results despite being well funded operations because of the practical issues associated with these species. The tiger may choose a territory anything up to 100 km2 and pandas are notorious for their unhurried approach to procreation. This is reflected in the World Bank's previous Tiger Conservation Initiative which ran between 1996 and 2004, in which bureaucratic unwieldy measures lead to corruption and a failure to engender the local population (our own Giant Panda breeding project sadly last year also announced a failure).

This is moreover twice the shame when the opportunity cost of this project could have supported a smaller and better managed project whilst simultaneously saving other species' tenuous hold on life. The same period of 8 years saw at least 5 species officially declared extinct and countless others joining the endangered and critically endangered lists. Consider the Carolina Red Wolf; a graceful animal with striking fur and a mixture of tawny, cinnamon and brown along the body and a black tipped tail. This critically endangered animal is exactly the kind that could be championed by conservationists, but who has heard of the Red Wolf? A further sobering reflection is that the Red Wolf is at least recognised by the scientific community as endangered. The monitoring organisation Wildtrack estimates roughly 800 cases in which a simple lack of data means we cannot even give a classification for the state of the species' population.

In cases where projects are funded by public donations this would be difficult to change as the public select their charity carefully based on their own preferences and the 'marketing' of each species, thus charities with the same ultimate goal (protecting biodiversity) are made imperfect substitutes by the varying species they target. Perhaps a better recipient of the large donations offered by organizations such as the World Bank would be those that help to make up for the imperfection in the market by monitoring which species are being neglected and use their resources to raise awareness, at which point conservationists and the public donation mechanism can take over.

Each case study of conservation tends to have unique factors that contribute to their failure or success, meaning there is no simple answer to conservation across the board. For example, the American bison recovered from endangerment after their introduction as a livestock whilst Sea Turtles have benefitted greatly from steady scientific research into how best to shield their reproduction. However all of these operations have one thing in common, that it was recognition in the public eye that uncovered both the necessary capital and the few dedicated individuals that found solutions to these problems. Sadly endangered species such as the Red Wolf and the Iberian Lynx are still awaiting public recognition despite arguably having the same appeal as the select few that are already household names. As the World Bank has pledged $100 Million purely for Tigers over the next decade, let us hope the opportunity cost of this isn't our unfortunate friend the Red Wolf.

This criticism may be premature given how young the pursuit of conservationism is. As mentioned before there is no simple solution and it is important that conservationists stay pragmatic and open minded about how to save each species. It has been suggested that Tigers are bred for the purpose of big game hunting and as unpalatable as that may be, it could turn out to be the only way to save them in the long term. Conservation efforts are an important exercise as through them we recognise our negative impact on this planet and try to minimize it. At the same time extinction as a natural long term process is paradoxically an important motor of variation and it must not fall to humans to protect animals that have backed into an evolutionary cul-de-sac, which would perhaps be just as unnatural as prematurely driving a species to extinction. As with most of human endeavour, conservationism should be a balancing act between hard fought battles and letting go when the time is right.

The Good, the Bad, and the Humanitarian Aid Industry

Alina Mika explores whether aid organisations benefit war and hunger-stricken regions

In the late 1960s the attention of the humanitarian aid industry was turned towards Biafra. Organisations such as Oxfam, the UN's World Food Program and Caritas fundraised for the victims of famine and war. Yet, not all of the money was given to the suffering Biafrans. All of these organisations made private deals with the head of the independent Biafran state, Odumegwu Ojukwu, paying him fees to be allowed to bring aid to Biafra. These fees were partly used to fund the war with Nigeria, the rest simply increased Ojukwu's personal wealth. The private deals did not end there; planes delivering aid had to reserve space for munitions and weapons.

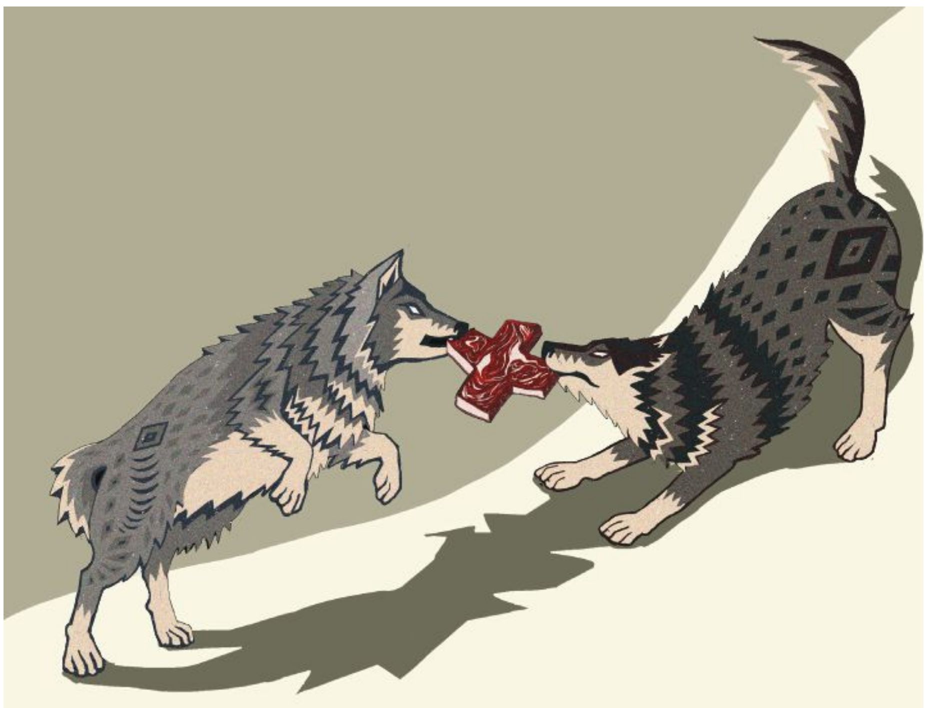
We are used to thinking of humanitarian aid in absolute terms: suffering is bad and aid is good. Although the former is impossible to deny, the latter deserves some overdue scrutiny.

The famine in Biafra was neither the first, nor the last case where humanitarian aid ended up in the wrong hands. During the Second Liberian Civil War (1999-2003) the President of Liberia, Charles Taylor, established a 15% tax on aid; the money was to be paid to him in cash. In 2006, Talatbek Masadykov, head of the UN mission in Afghanistan, declared that over one third of food aid was handed over to the Taliban. In 2005, the Sri Lankan Tamil Tigers rebels, a brutal terrorist group, were given 25% of the aid which was meant for tsunami victims. Most commonly, the organisations knowingly hand over aid to the rebels. "We wanted to help the people affected; that was our aim. We didn't worry too much about the fact that it meant financing the Tigers" said a Caritas employee.

These, and many other examples, highlight the core principle of humanitarian relief for war-affected regions: provide aid *no matter what*. Under this principle, aid is given to war victims even though some of the aid money ends up in the pockets of the warring parties or corrupt politicians. Is this a necessary evil? Or does it in fact undermine the goals of the humanitarian organisations?

It is difficult to generalise because each conflict or natural disaster is different. From a utilitarian perspective, one could argue that a shorter war results in fewer victims. From this perspective it would be beneficial for humanitarian organisations to scrap the 'no matter what' principle and tailor their response to crises. Research and cost-benefit analyses could be conducted to determine the extent to which humanitarian aid agencies should get involved. However, in reality such measured policy appears infeasible. Firstly, due to time constraints. Secondly, because the aid industry is often disjointed, inefficient, and overly reactive to the media.On average, every day 83 new charities are exempted from tax in the United States. Humanitarian aid is in fashion. The large number of humanitarian organisations has made the delivery of aid increasingly inefficient. The organisations pursue their own agenda and work towards their perception of what the country or region needs. Unfortunately, these perceptions are not always correct as many organisations are created by outsiders. There are no binding international agreements or major regulations, therefore organisations are free to do whatever they believe is appropriate.

The famous – or infamous – Kony 2012 video has been watched by over 93 million people. It presented an uncomplicated story of the bad guy, Joseph Kony, who abducts Ugandan children into his army, and the good guys, all of us with Internet access, who have the chance to stop him. Not long after, the world heard an updated story. Kony had left, and Uganda was not helplessly waiting to be saved by the Western world – she was pursuing initiatives herself. The Kony 2012 video was impressive in its ability to increase awareness of Joseph Kony. However, it failed to fully explain the situation in Uganda, and did not focus on the current problems of the northern Ugandans: HIV, child prostitution, and nodding disease. The extent to which Invisible Children improved the situation is even further undermined by the fact that 25% of the $9 million raised in 2011 was spent for travel and film-making purposes.



Joanna Lisowiec

Undeniably, it is a good thing that human beings reach out to help those less fortunate, however, in order to truly help, one needs expertise and knowledge of the situation. Unfortunately, evaluating who needs help and how this help should be delivered becomes marginalised when the media narrowly focuses the world's attention on specific humanitarian crises.

Right after the 1994-95 Rwandan genocide, thousands of Hutus fled the country, scared of a potential Tutsi retaliation. Approximately 750,000 Hutus settled next to Goma, now in the Democratic Republic of Congo, a piece of land which soon turned into a refugee camp. The media coverage was big, and soon humanitarian aid organisations all flocked to Goma. Goma turned into a relatively lively community with over 2000 bars, 450 restaurants, and 60 hair salons. The aid workers rarely intervened with what was happening at the camp, but helped out by supplying its inhabitants with vital supplies. Control at the camp was taken by the former elites, the extremists and militias, who started recruiting men from the camp to attacks Rwandan Tutsis. Unsurprisingly, in 1996 the Tutsis attacked Goma and burned it to the ground. All this happened while Tutsis in neighbouring Rwanda were still recovering from mass extermination. Yet, the lack of media attention on Rwandan Tutsis reflected little interest and a subsequent lack of help from humanitarian organisations.

Despite cases like this, it is important not to completely discard humanitarian aid. Even though 1/3 of the aid meant for Afghanistan went to the Taliban, the remaining 2/3 saved lives. Since the establishment of the International Red Cross in 1863, marking the beginning of humanitarian aid, the suffering of millions has been eased. However, as this article has demonstrated, there are flaws in the way aid is advertised, targeted and delivered.

In order to improve the state of the humanitarian aid industry, aid organisations should be held accountable for their actions. This would provide an incentive for them to carefully analyse how and where aid should be delivered. Furthermore, aid organisations' employees should not go unpunished for their wrong doings. It should no longer be acceptable that prostitution increases in places where there is an influx of aid organisations. Aid has become an industry; therefore it should be subject to clear rules and regulations.

The good news is that there are organisations whose aim is to increase the accountability of aid and facilitate collaboration between various aid organisations. These include the Sphere Project, which created a set of core principles which aid organisations should follow, and the Humanitarian Accountability Partnership (HAP), which attempts to make sure that aid is provided responsibly. The bad news is that some of the aid organisations, like the World Food Program and Oxfam, are bigger and more powerful than organisations set up to hold them accountable. In addition, membership to such accountability and collaboration schemes is voluntary, which is why to date HAP has only 68 full members.

Considerations on the Bitcoin

Amy Read discusses the merits of the online currency 'Bitcoin'

The Economist recently published an article discussing the Bitcoin, an online currency issuable by any Tom, Dick, or Harry – well, not just *any* Tom, Dick, or Harry, but just about. Said Tom, Dick, or Harry must own or have access to a computer and be able to submit a correct answer to an exceptionally challenging maths problem, after which the Bitcoin is issued to the solver via an encrypted online transfer. Invented by Satoshi Nakamoto in 2009, the Bitcoin is not subject to regulation by any central bank or governmental authority, and can be traded online.

Although a limited number of individuals and businesses hold and trade the currency, it remains more than just a novel idea. The Bitcoin presents a fresh challenge for regulators, and not only monetary ones. Used in conjunction with the new-fangled Tor browser, it facilitates a whole host of legal finagling; for instance, one might very well succeed in a stealthy online purchase of illegal substances, thanks to their joint ability to dissociate the trading parties' personal information from the transaction. Without a specific economic area of origin, it upsets our existing concept of what a currency entails: it is not subject to manipulation by monetary policy, its production requires no printing presses, and so forth. Supply cannot be increased or decreased via the purchase or sales of bonds; rather, a peer-to-peer network expands supply according to a geometric series, with a cap of twenty-one million Bitcoins producible. Curiously, there is no way to reduce the existing supply. Inflation is assumed to be intrinsically managed by the requirement for extraordinarily difficult calculations to be made. The issue of deflation appears to be an overlooked consideration, but no central banking authority has ever been endowed with any real tools for combatting it anyway.

A frugal innovation of sorts, the Bitcoin cuts out a number of key players in the traditional fiat money value chain. In original – i.e. not exchanged for bank notes, etc. – form, one does not require an account with a banking institution in order to store it. Tom can transfer as many Bitcoins as he likes to Dick, Harry, or whomever he wishes in an internet instant. Moreover, he avoids foreign currency translation, transfer, and other fees usually collected by financial institutions in so doing. This is certainly more than I can say for the three-day, fee-accompanied transfer I recently made between my U.S.- and U.K.-based banking accounts. Still further, the Bitcoin escapes the need for all materials – e.g. printing presses, ink, etc. – used in the production of typical fiat money; no vaults or fortressed repositories are required for its warehousing.

Those who share a Hayekian (Austrian) economic view would argue that a currency exempt from government intervention promises even grander economic benefits, namely forefending of the boom-and-bust pattern the world has experienced so relentlessly from the twentieth century forward. Such individuals maintain that intervention through monetary policy was the cause of events like 1929's U.S. stock market crash, the 1990s' U.S. 'dot com' bust, 2008's U.S. subprime calamity, and the recent Eurozone crisis. The absence of such manipulations could result in fewer conflicts of interest and market inefficiencies, which we have seen give rise to the need for still further – and so far, seemingly unsuccessful – regulatory action.

And yet, the Bitcoin brings its own set of trappings to the table. If

Tom, Dick, and Harry are going to store Bitcoins on their personal hard drives, they emphatically require advanced security measures against hackers. The need for high-level security has heretofore been largely reserved for the online proprietor, but the Bitcoin brings this issue to fore with even the somewhat-average individual. If in time the Bitcoin enjoys a wider range of circulation, the forages of hackers will doubtless proliferate, likely leaving today's typical personal computer unsuitably secured and demanding the advent of newly-directed online security services. Niche security service providers such as U.S.-based StopTheHacker have existed to safeguard businesses with strong internet presences for some time, but a world full of *individuals* requiring stronger online safety would open an entirely new market ripe for fresh service offerings.

Whilst other currencies are primarily confined to their domestic markets and remain hampered by historical and political baggage, the Bitcoin transcends these influences and exists in a virginal and unique position to demonstrate to the world how a currency unconstrained by regulatory intervention would behave. Unassociated with a central issuing authority and sans direction from a backing government, it appears exempt from regulatory interference. However, should the Bitcoin rise in usage, it will operate in step with pre-existing tariff configurations the world over, which will render it susceptible to creative indirect or reverse regulatory intercession. Nevertheless, such intervention would be relatively minor compared to the nature and extent of monetary meddling possible with other currencies.

The Bitcoin has received precious little commentary by the Mario Draghis and Ben Bernankes of the world. Given from the outset a capped twenty-one million unit circulation and with acquisition restricted to the intellectual elite or those who otherwise have access to exchange with such, possibly their relative silence speaks to the Bitcoin's present small-scale suitability. Alternatively, some might fear that – for all its apparent benefits – large-scale adaptation of the Bitcoin system could actually increase international economic risk. If adopted globally – either as a single uniform currency replacing monies used presently or as a supplementary currency – it may inaugurate a standardized international monetary policy with divergent fiscal policies. This kind of environment is presaged by no shortage of controversy: those encamped with the likes of Keynes, Krugman, and Stiglitz will warn that resultant extreme income disparity jeopardises economic growth, whilst the Hayeks, Friedmans, and Barros among us will argue that the Bitcoin's built-in supply ceiling dissolves apprehensions anent monetary policy by ensuring stabilisation of money supply. Scale of adoption notwithstanding, the Bitcoin's capacity for evolution and provision of – if nothing else – an experimental frontier upon which lessons might be learnt by policy makers around the world, is nothing short of inspiring.

I Think You Have a Spending Problem

Sam Slaughter places UK austerity in the context of our own values regarding saving and spending

The ongoing issue of the UK government's deficit is a controversial one, and a big question regards whether Cameron and Osborne have successfully managed to wind back the expanding state sector and if, like they say it will, pay any dividends.

The alternative to the current approach would be to stick our heads in the sand and leave the deficit at an uncomfortably large level. The coalition has chosen to do the opposite, poke their head out and make steps towards balancing the budget. It is a difficult move and will undoubtedly upset a large proportion of the public, especially those most in need of the state.

In theory in the long run, governments just like average households cannot live too far beyond their means, leaving their inflows to heavily undercut their outflows. Our current debt as of September 2012 is 67.9% and as evidence shows from a 2010 European Central Bank Working Paper, "the annual change of the public debt ratio and the budget deficit-to-GDP ratio are negatively and linearly associated with per-capita GDP growth." Therefore, these large debts have a negative impact on the economy in terms of growth, crowding out of private investment, sometimes high inflation rates and general instability. Although UK inflation is currently under control, the maintenance of exceptionally low interest rates has the same effect as a high inflation rate would have on our savings.

The catch-22 of unstable economies is that a never-ending cycle can occur in which high inflation rates and low growth affect the poorest first and subsequently the government often attempts to accommodate those struggling via quantitative easing. The key point here is that once a country actually climbs out of recession, people are adapted and accustomed to this higher level of government spending, and consequently dislike its withdrawal. The cycle continues, either by remaining in a puddle of debt, and a weak economy that requires more spending, or by climbing into a stronger economy where (as I will explain) it remains easier to continue to spend excessively. And right now, the coalition is currently working against this conventional method of quantitative easing; with such low interest rates, further expansionary monetary policy is out of the question.

From a cynical perspective, we (the public) have become too comfortable allowing the state to spend on us. Like spoilt children we struggle to accept less pocket money from the state. As humans this is a natural reaction, we always self-interestedly strive to achieve the highest wealth possible. But if someone puts restrictions on you, redirects you towards a slightly lower standard of living it's very disempowering and you start to miss what you had once it's gone, hence our rather large public outcry against current austerity measures.

Perhaps however, we shouldn't blame ourselves for falling into this trap. Perhaps we should be mindful of the government's activity. Not that they are appropriately attempting to balance the budgets but that we have been fooled into relying on their spending in the first place.

Occasionally we forget that political members are just as self-interested as the economists we are. As any family knows, it's much easier to give a demanding child what it wants rather than face the temper tantrums. In the same vain it's much easier for political parties to keep spending, in order to please their voters and remain in positions of power. Unfortunately this is where our naivety hits the hardest; we haven't fully appreciated the costs of the government spending in previous years. This is what is known in the literature as fiscal illusion; we fail to recognize the true cost of public services because they aren't fully explained and translated to the public. Since the government tends to fund its revenue via borrowing rather than instant and direct taxes, it's even easier to be misled with how money will need to be taxed in the future to regain that deficit. It also guides us into a false sense of security, since we haven't felt the squeeze of tax hikes but see excess public spending all around us, we don't necessarily directly relate the two.

Assuming that we (the public) have been unfairly tricked into growing accustomed to higher than sustainable government spending, what can we do about this? Unfortunately, it seems by economic rationality there is actually very little the public will actually do about it. As Anthony Downs argues in *An Economic Theory of Democracy*, voters tend not to acquire the same level of preparation and knowledge towards choices for their political party that they would when making a private decision. When buying a car, for example, if you're going to be the sole owner you are the only one who would bear the consequences over an ill-informed decision that leaves you broken down on the motorway. But when a government metaphorically allows the economy to break down, the public share this cost, which means we are less likely to take the due care to criticize and re-vote correctly. On top of this, individual voters have no ability to control the electoral outcome with their miniscule proportion of the vote. Therefore, you have less reason to build up accurate knowledge about recent fiscal policy and this unfortunately is entirely rational.

> "The alternative to the current approach would be to stick our heads in the sand and leave the deficit at an uncomfortably large level"

There is even more evidence to query the true intentions of the governments attempt to keep our budget balanced. Recent studies in 2009 by highly respected academics and ex-economic advisors to the US government, Romer and Romer suggest that even if there is a tax cut, it doesn't help to cut spending. In fact evidence shows that tax cuts actually lead to increases in government spending. This negative correlation lacks common sense and certainly makes no in rows into balancing a budget. If in a private household one's income suddenly dropped one wouldn't subsequently continue to spend more than before. This evidence suggests that tax is a political tool rather than an economical tool and there is an inherent illogical approach to public accounting.

Most people would agree that smooth and stable government spending that follows a rough correlation with the level of revenue is desirable, and preferable to sudden fluctuations in response to boom or bust. My point is that if people expect fair, consistent taxation/spending from the government then we should take more responsibility and diligence in acquiring good information about current fiscal policy and more importantly be absolutely clear in what we demand from the state understanding what is truly affordable within our means. The government revenue stream comes from us; their debt is our debt and our children's debt. Before we blame the greedy bankers, perhaps we also need to reevaluate some of our own values with respect to savings and spending. The level of private debt in recent years hasn't exactly been a good example to the government about what we expect from them. Maybe, as the title says, we need to bite the bullet of austerity and accept that everyone's (both private and public) debt has been too high and we need to balance our books, putting a near decade of living beyond our means behind us, and start a period of sense and reform.

The Economics of Urban Farming

Briana Pegado takes a look at urban farming in Northwest Milwaukee

The politics of the economy of the United States food system must be addressed. Monopolies of food supply in the US and pesticide suppliers are creating un-resilient crop that in large part wiped out the crop in the heartland of the US. The food industry is more concerned with making a profit than with our health. Lack of regulation in the food industry allows for companies to take advantage of the poor by subsidising corn products that are central ingredients to compounds such as sucrose, high fructose corn syrup and other additives that cause obesity. A mother can more easily afford to feed a family of four on McDonalds than the fruits and vegetables available at her local grocery store. The modern American food system has taken farming away from the farmer and made it such a difficult livelihood that most farmers in the United States work two to three jobs just to put food on the table.

There is no denying that we are beginning to change our attitudes toward food and indeed we must. Increases in obesity and food related illness have sparked debate around access to healthy food. In more affluent communities, consumer consciousness is shifting towards more ethical and 'sustainable' sources of food. This change in attitude has influenced consumer preferences and consequently, consumer demand in certain markets.

But the new food movement is not just a luxury for the affluent. In a low-income community in Northwest Milwaukee, Wisconsin an 'urban farm' operates on a two-acre plot of land, called *Growing Power*. Growing Power (GP) is situated along West Silver Spring Drive, which runs the length of a food desert in this part of Milwaukee. A food desert refers to an urban or rural area that is experiencing food scarcity. Before GP, there was no source of fresh fruits or vegetables for a five-mile radius. Instead, fast food restaurants and liquor stores dot the landscape in this council-housing urban centre.

The Midwest was once considered the heartland of the United States. This region is now suffering from record-breaking droughts. Urban farming initiatives are breathing new life into an increasingly under productive region. GP provides healthy food the area badly needs. The farm grows pea shoots, spinach, kale, bell peppers, tomatoes, cucumbers and more. Mountain goats, local bees and chickens rescued from factory farming conditions are kept onsite as livestock. Furthermore, the farm internalises the external environmental and social costs of the local food system. The farm collects food waste from major grocery stores and restaurants to create compost to use as rich soil for crops.

GP contributes to the productivity of the city four-fold. First, by providing access to education on healthy eating and making organic food accessible to formerly inaccessible parts of the community; second, by working with the city to provide jobs to youth and members of the community formerly incarcerated or considered high-risk members of society; third, addressing food scarcity created by the food desert in the area by providing fresh produce; and fourth, protecting ecosystem services and minimising waste through their compost program. GP is also contributing to a national campaign against obesity in the United States by supporting overlooked communities that fall through the cracks of a competitive market system.

Technology has allowed us to progress. Innovations in the packaging, storage, production, and distribution of food are positive. The mechanisation of the food industry has made it much more efficient to feed an increasing population. We have access to food when we want it no matter where it comes from. The fact remains however that monopolies in the food system create inequalities. Urban farms should not have to emerge out of these circumstances. We cannot continue to promote behaviour that puts profit and convenience before our health.

> "The food industry is more concerned with making a profit than with our health. Lack of regulation allows companies to take advantage of the poor"

In simple economic terms, there has been an increase in demand for sustainable food - food that comes from suppliers that are transparent and stand by their products. Smaller-scale urban farms, farmers markets, food co-ops, and community-supported agriculture (CSAs) have met this demand. Suppliers are beginning to expand the market for their small-scale food production by supplying to lower income communities like Northwest Milwaukee. They realise exposure to slower food creates demand in these communities. Urban farming makes internalising externalities a profit maximisation strategy. They are an example of a sustainable business model that not only contributes to a healthy, competitive, and diversified economy but also provides for the very consumers that create that demand, the demand that pulls the levers of the market and drives our economy.

Julie Ritchie

Could We Have Relieved the 'Great Recession'?

Michael Buck discusses the pros and cons of nominal income targeting

Background

Upon being granted independence in 1998, the Bank of England was given a statutory mandate to "maintain price stability". Currently, 'price stability' is defined by the Treasury as 2% annual CPI inflation in the medium term. For nearly a decade this approach to monetary policy appeared to be a resounding success with both stable employment and stable inflation, standing in stark contrast to the UK's performance prior to inflation targeting. Unfortunately, this was not to last as in 2008 economies around the world entered their sharpest downturns since the 1930s.

Recently, a number of prominent economists - including such luminaries as Paul Krugman and Christina Romer - have suggested that targeting the path of nominal income rather than inflation would have resulted in a milder recession. 'Nominal income' simply refers to aggregate income in an economy, as measured by nominal GDP (NGDP), for example. By identity, total income must equal total spending, so targeting the path of nominal income can also be thought of as targeting the path of aggregate demand.

The Advantage of Nominal Income Targeting

Monetary policy affects all markets: goods markets, asset markets and labour markets. For the purposes of this article, it will be helpful to focus on just one of these - specifically, the labour market and how monetary policy can combat the problem of 'sticky nominal wages'. Wages are said to be sticky in nominal terms if they are slow to adjust in response to shifts in labour demand or supply schedules, particularly in the downward direction. This can arise due to long term fixed contracts or simply because firms fear that lowering nominal wages or increasing them by less than initially expected may be bad for morale. Naturally, this stickiness is problematic; if nominal wages will not adjust to clear the labour market then some workers may be pushed into involuntary unemployment. There is an alternative to nominal wage changes, however: higher aggregate demand. This will mean more nominal revenue for firms, allowing them to afford their nominal wage commitments, so the 'sticky' nominal wage need not adjust in order to clear the labour market. However, this does have a cost as some of this aggregate demand growth may also translate into higher inflation.

The key advantage of NGDP targeting in this area arises in the face of an aggregate supply shock. All other things equal, such a shock would increase inflation and lower output growth. Under inflation targeting though, the central bank would need to contract aggregate demand in order to bring inflation back down to target; if wages were perfectly flexible, the unemployment rate would remain unchanged while inflation would fall. However under NGDP targeting monetary policy would not respond to this - instead, inflation would be allowed to rise as real growth correspondingly falls, so nominal wages relative to total nominal income remains unchanged. In such a scenario, inflation targeting appears superior to NGDP targeting.

If wages are sticky though, they will not immediately adjust to the new lower level of aggregate demand, resulting in a period of excess unemployment until such an adjustment occurs. If we consider this scenario to be more realistic, then the best policy target depends upon the weight one puts on the relative welfare costs of inflation and unemployment. The higher the latter relative to the former, the more preferable NGDP targeting is to inflation targeting.

As an illustration of this argument, consider the UK and Israeli economies. Between 2008 Q1 and 2011 Q4, UK inflation averaged 3.4% against a pre-recession (2001 Q1 to 2007 Q4) trend of 1.8%, whereas in Israel it averaged 3.2% against a pre-recession 1.8%. This is an almost identical outcome. By contrast unemployment outcomes were quite different, with the UK unemployment rate rising from 5.1% prior to the recession to 8.1% and the Israeli rate falling from 6.2% to 5.4%.

The source of this difference may well lie in the behaviour of nominal wages relative to nominal GDP. Between 2008 Q1 and 2011 Q4, UK nominal wages increased by an annualized average of 2.3% against a pre-recession trend of 4%, while NGDP growth averaged 1.9% against a pre-recession trend of 5.4%. As a result, nominal wages as a share of NGDP rose. By contrast, in Israel nominal wages increased by 2.1% against a pre-recession trend of 1.7%, while NGDP growth averaged 5.8% against a pre-recession trend of 5%. As a result nominal wages as a share of NGDP fell. This may be anecdotal evidence, but it fits with a general trend across the developed world: the closer NGDP remained to its pre-recession growth path, the smaller the change in the unemployment rate.

Is it Achievable?

Nominal income targeting may well have resulted in a milder recession, but there is one important thing to bear in mind: it may not have actually been *possible* for monetary policy to achieve such a target given the zero lower bound on the short term interest rate. The Bank of England effectively hit this bound in March 2009, when the target rate was lowered to 0.5%, where it has been held ever since. After this, conventional monetary policy could do no more, so the Bank's ability to affect aggregate demand was neutered. This argument has been put forward by the likes of John Taylor (of Taylor Rule fame) and John Cochrane as the main reason why nominal income targeting would have made no difference in practice.

Yet this argument is clearly incomplete, for at the zero bound central banks still have 'unconventional' monetary policy options such as quantitative easing (QE). Under QE, the Bank buys long term government bonds with new base money with the aim of increasing their price and thus lowering their yield. With lower yields on government bonds, private agents should rebalance their portfolios to include relatively more riskier and higher yielding assets. A higher demand for such assets would result in higher prices and lower yields for these as well, which means that the private sector's funding costs should be lower. Moreover, since higher asset prices means higher gross wealth, banks should be more willing to lend. The result is an expansion of credit where firms find it easier to expand, thus increasing output and employment.

The Bank itself estimates that its bond purchases increased asset prices by around 20% and had a peak impact on real GDP of 2%. Had the size of its bond purchases been three times larger, it is highly likely that the effect of the purchases on aggregate demand and in turn real output would have also been larger (although perhaps not three times larger, given diminishing returns). Of course, QE can be used under both inflation targeting and nominal income targeting, with the only difference being the size of the purchases made. Given that nominal income is approximately 10% below its pre-recession trend while inflation has been above target for the last 3 years, it is almost certain that under nominal income targeting the Bank would have made much larger purchases.

Indeed, when opting not to increase the size of its purchases, most members of the Monetary Policy Committee specifically cite the fact that larger purchases would risk inflation being above target for an unacceptably long period. To quote MPC member Martin Weale, "[i]t is certainly not self-evident to me in the light of the apparent stickiness of inflation that substantial extra support for the economy would be compatible with the inflation target".

Time for a Change?

Overall, there is strong theoretical and empirical evidence in support of the view that had the Bank of England been targeting nominal income rather than inflation, the recession would have been much milder. I have considered one means through which this could occur: by reducing disequilibrium in labour markets with sticky wages to a greater extent than that achieved through inflation targeting, thus allowing greater employment. As the UK labour market does appear to have some stickiness, it is highly likely that unemployment would have been lower with NGDP targeting.

It is also important to note that we are still far from the practical limits of monetary policy, meaning that such a target is actually achievable. The Bank still has ample room to increase asset purchases in order to hit a NGDP target, and it appears that the main reason for not increasing purchases is that this would be incompatible with its current inflation target. This decision is about the choice of aim not the choice of methods, and what is desirable depends entirely on the relative welfare costs of inflation as compared to the welfare costs of unemployment.

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Review

America, the Land of Opportunity?

Vainius Glinskis reviews *The Price of Inequality* by Joseph Stiglitz

America: The Land of Opportunity, right? Well apparently not. Joseph Stiglitz, winner of the Nobel Prize in economics, argues that there is a high level of inequality in America which is not just bad for the economy, but also creates an unfair system in a country "Of the 1% by the 1% for the 1%". In his new book *The Price of Inequality*, he explains where this inequality has come from, how politics has been shaped by people at the top to create this opportunity for inequality, why this inequality is bad for the economy and finally, what can be done to achieve a more equal and prosperous society.

Firstly, he argues that there is a high level of inequality. Two key observations he makes are: income growth for the past few decades has primarily occurred at the top 1% of the income distribution and the same people received 93% of the additional income generated from the recent 'recovery'. He then attacks the old notion of opportunity in America. Out of all the industrialized nations people in the bottom 20% have the smallest chance to make it to the top fifth. He cites studies which show poorer students who do better in university have a smaller chance of graduating than rich kids who perform badly - even if the poor kids do get the opportunity to graduate, they are still worse off than their rich, low-achieving peers. Stiglitz goes on to provide numerous similar examples, enough to make an American like myself feel uneasy with the prospect of living in a society which is so systemically unfair

The cause of this inequality is pretty straight forward: greed. The people at the top have consistently taken a bigger slice of the economic 'pie' resulting in the hollowing out of the middle class and increasing poverty. How could such a thing come to pass? Stiglitz argues that the 1% has largely been able to persuade the 99% that their goals are aligned, but even when they could not convince the masses, it did not really matter. American politics has gone from a "one person, one vote" system to a system of "one dollar, one vote". Lobbying and endorsement have increasingly played a larger role in politics, forcing politicians to play along with the interests of the wealthy lobbyists.

What can be done? Stiglitz proposes a set of comprehensible solutions including increased regulation in the financial industry, a better tax system without loopholes and ending government giveaways like subsidies for large corporations. One really has to read the book to get a full understanding of the many powerful, evidence-based arguments and I encourage you to do so. The language is not too hard to understand and with even a very basic background in economics the concepts are easy to follow. Although this book focuses on America I would still highly recommend it to any non-Americans interested in inequality, globalisation and ties between politics and economics as Stiglitz intertwines these topics in an eloquent and comprehensive way.

Hopefully with publications like this and the Congressional Research Service report which was recently allowed to be released, the American public will wake up and realise the unfair system they are living in and that something can be done to change it.

Understanding Global Financial Markets

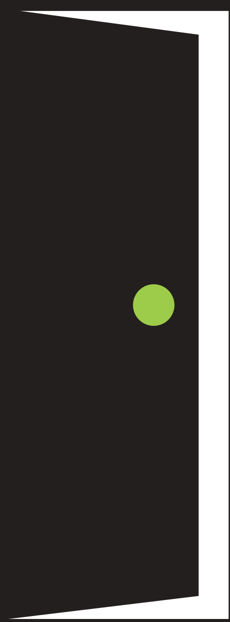
Jon Chong reviews *An Introduction to Global Financial Markets* by Stephen Valdez and Philip Molyneux

For many Economics undergraduates, applying to 'Spring Weeks', internships and placements has become a necessary part of university life. In this regard, Stephen Valdez and Philip Molyneux's *An Introduction to Global Financial Markets* should be viewed as required reading. Billed as an understandable crash-course in the global financial systems that pervade our society, it provides an undergraduate level introduction to commercial and investment banking, money, bond and stock markets. When preparing for that major bank's insight day, or for a hedge fund's networking dinner, this is essential reading.

The book's arguments and explanations are backed up by an abundance of data. Clearly presented and fully explained, this data has been continuously updated throughout the various editions. The book's strongest feature, however, is its handling of the Financial Crisis. In a dedicated chapter, the authors deal with the credit crisis, the US subprime market and the problems of securitization. It is a masterfully adept description of interconnected issues that goes far beyond the bland tropes delivered by the press.

The text covers a huge range of areas; the role of central banks in different countries, the difference between commercial banking and investment banking, and the workings of hedge funds and private equity. My favourite section is the authors' discussion of investment banking. Providing explanations of corporate finance, securities trading, and loan arrangement, they finish by relating the industry to the current crisis and discussing how government regulations affect the sector.

It could be argued that the book suffers from its own accessibility; those readers looking for great technical insight into a very specific area may well be disappointed. But to fulfil this demand would begin to exclude the interested amateur, and that would negate the point of the book. The world of finance can seem overwhelmingly complex and nebulous; *An Introduction to Global Financial Markets* provides a well pitched explanation of it. Comprehensive content complemented by cross-country comparisons and simple prose make this book recommended reading for the interested or aspiring student of finance.



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