

to fail,” these financial intermediaries lacked discipline, accountability and transparency, and proved largely immune to the downside of their excessive risk taking.

People also felt betrayed by businesses that they saw as playing fast and loose with financial instruments that few seemed to understand. Investment firms took excessive risks using resources that either had deteriorated greatly in value or had never existed at all.

The fact that financial markets could come so close to collapsing has given citizens a glimpse of the fragility of modern finance and its strong dependence on mutual trust. For any economy to function, the participants must trust that the system is reasonably fair. Trust between individuals is a reciprocal behaviour. The system would fail to function if there is a lack of trust on either side.

Hence, a question now arises as to how the financial industry can rebuild its image. Building institutional and industrial trust is not easy. One way to do so is through performance. Once investors begin to recoup their losses and the market rebounds, any concern or hostility towards the industry will likely dissipate, at least temporarily. In fact, we are already seeing evidence of the beginning of this process. However, relying solely on performance to build and sustain public trust can be risky, as industrial performance is often cyclical, and in a downturn, the chance of losing the public's confidence can be high.

For the financial industry to be perceived as trustworthy, ethical and high performing, especially in light of the financial crisis, it must develop the capacity to respond to and learn from experience and generate positive

outcomes. The financial system must act in accordance with a set of core values and beliefs, which should be aligned within and across firms. Another critical component in the trust rebuilding process is creating a sense of positive intent towards the stakeholders of the industry. Positive intent requires that the industry should be clear in its motives and communicate the same to its shareholders. When there are common values and goals, customers and clients are more willing to believe that a firm or industry has their best interest at heart. When there are no mutually held values or expectations, there is a perception of imbalance in power, along with greater risk and vulnerability, which prevents trust from flourishing. The financial industry needs to focus on these aspects and regain the people's trust quickly, so that it can contribute to greater growth.

Developing Real Economies in Synthetic Worlds

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“In the cyber universe, though the worlds are synthetic, the economies are real. Cyberspace is ruled by the law of supply and demand, which quantifies prices exactly as happens in the real world,” observes the Italian economist Loretta Napoleoni, known primarily for her analysis of terrorism finance networks. In her book *Rogue Economics*, she turns her attention to Chinese counterfeiters, Russian oligarchs, Congolese slave traders and other

'globalisation outlaws', who deeply influence the production and distribution of everyday consumer goods. Among her subjects are the workers of 'online sweatshops' and virtual currency moguls who contribute to internet-based entertainment industries, the turnover of which rival the GDP of several countries in the world. Online gambling and multi-player gaming may appear to be industries which are too sleazy or frivolous to illuminate core issues of economic development, but I attempt here to demonstrate how it is that these sectors, and their similarities with other internet-based industries, illuminate several concerns integral to development economics. Further, these sectors also reflect the different paths chosen by China, India and South Korea in understanding and achieving development.

Napoleoni wrote her book in 2008, prior to the social gaming and gambling app industry explosion, which are forecasted to cross \$ 100 billion in profits by 2016, but which rely to a great extent on the actors who built the online industries charted out in *Rogue Economics*. Estimating the number of the workers involved in this 'internet-based cultural sector' would not take into account the informal sector where a substantial number operate. A better estimate would therefore be from the supply of such products and services to online platforms and direct consumers, and in this regard China and South Korea fare exceedingly well. Napoleoni partially attributes China's success to its much criticised trade policy, and notably its 'flagrant disregard of intellectual property', something which India has a better global reputation for. It could be, therefore, that the reason why China claims more producers of 'under the table' secondary market currencies for internet gaming is

because there is no fear of violating copyright restrictions of the companies which produce and license such games. In addition to trade policy, China's domestic laws also appear to be more tolerant towards 'immoral markets' such as gambling than India's. Thus, ultimately, in a trade-off between reputation and long-term development policy on one hand, and short-term economic growth on the other, China appears to have opted for the latter. While this appears to be an explanation behind the discrepancy between developing countries' immediate earnings from such sectors, this is not the whole story. Interestingly, such industries were not substantially affected during the economic crisis, and despite a slight decline in the funding of new products, there was no lapse in overall demand and turnover. Thus, they appear to be less vulnerable than other export-driven products and services of developing countries.

But what is yet more interesting is that China and South Korea are important contributors to the internet-based creative and design sectors as well, where India lags behind immensely. This could be attributed, in part, to infrastructure and to the number of internet users. As per World Bank estimates, around 38.3% of China's population are internet users, as against India's 10.1%. However, in absolute terms, India has more internet users than Hong Kong and South Korea, both of which earn far more from the design and creative sectors. Another indication of how infrastructure in terms of internet access may not explain participation in web-based platforms is the decision to introduce Spotify (a hugely successful commercial music streaming service, where, for a relatively small monthly fee, one can access an enormous music library as well as publish music) in Hong Kong, Malaysia and

South Korea, but not in either in China nor India, where internet users have a sense of entitlement to free music. While belief in copyright may be a more ideological issue, what cannot be disputed is that the business model followed by music distributors and producers has changed dramatically across the globe, and platforms such as Spotify are often integral to the popularity and earnings of new unknown artists.

While trade policy and infrastructure are undoubtedly explanatory factors in the Asian demographic distribution vis-à-vis earnings from internet-based cultural sectors, I have tried to show that such factors do not provide a comprehensive causal picture. This is further highlighted when contrasted against India's liberal attitude towards the bitcoin, which is a trading system that has been shown to support anonymous transactions in drugs and gambling. Thus, though the Supreme Court has declared online gambling to be illegal in India, it appears to be tolerated when it comes to gambling implicitly through the usage of bitcoins. Hence, India's sophisticated financial sector has managed to take advantage of bitcoins, but other sectors like the formal creative sector and the informal technological sector lag behind their Asian counterparts.

The lesson to be learnt from Napoleoni's analysis is that though the connection between online sectors and potential earnings is incontrovertible, but given the fact that these sectors operate as 'rogue markets' means that there is relatively little scope for regulating them meaningfully to secure alignment with specific development policies. As countries like China appear to have developed a robust informal internet-based human capital pool, they are able to take advantage of such markets. It is a sustained interest in immoral markets that

may in the medium or long-run lead to the development of human capital, whereby there is more engagement in the production of secondary goods and services than consumption of such problematic products. Given that the morality of internet transactions cannot be controlled, as evidenced by the bitcoin, it would make sense for India to concentrate on equipping its population with sophisticated literacy catered towards internet-based products and services, and perhaps rethink how intellectual property protection adds to economic development. Since online gambling can still be conducted by Indian internet users using bitcoins, it appears that only direct internet gambling is illegal. Taking a leaf out of how China deals with uncontrollable informal internet earnings, India could apply sound economic reasoning to understand how informal users of illegal online markets such as gambling could use their inevitable participation and hone it into capital.

Policies based on morality or legality regarding the working of the newer internet-based sectors may not meaningfully add to the formalisation of the informal sector, which is an integral part of development. It is, thus, essential for policymakers to understand how these markets operate and how they contribute to the informal sector in particular and economic development in general. While policies may view these markets as temporary, they indeed do form tougher and more durable economies, which are very much real.

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