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Contents

NOTES TO CONTRIBUTORS

Papers for publication in future issues of the *IUG BUSINESS REVIEW* are welcomed. Only papers related to international business, international relations and diplomacy, international trade and cross cultural business communications will be considered with emphasis given to the practical aspect of international business.

The following topics will be addressed in future issues of the *Journal:*
Cross cultural business negotiations
Cross cultural marketing communications
Exporting/Importing
E-business and digital marketing
Foreign joint ventures and strategic alliances
Investment and financial risk management
Capital markets and corporate finance
Entrepreneurship and enterprise development strategies
Global marketing management and strategies
International relations and diplomacy
International trade promotion
International project management
Marketing channels and supply chain management
Case studies on global business issues
Contributors should send their manuscripts via e-mail to the

Editor (ccellich@iun.ch). Manuscripts should not exceed 20 double-spaced pages.

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EDITORIAL

For the 4th issue of the *IUG Business Review*, articles covering a wider range of topics to reflect the introduction of new programs and courses at the University, as well as the research interests of the faculty, have been considered. A selection of the best papers was retained for publication following the recommendations of the Editorial Review Board and external experts. Finally, the composition of the Editorial Review Board was updated with new members to represent the University's expanding educational programs. Thanks to the commitment of the faculty, the administrative staff and management, the 4th issue of the *IUG Business Review* became a reality.

The first article *Potential and Challenges of the Sharing Economy*, brings to notice the emergence of the sharing economy through the remarkable rise of companies such as Uber, which in 2016 was worth an estimated $51 billion, and Airbnb, worth $30 billion. What is remarkable about such companies is that they do not own any assets or perform any services directly for the customers; instead, they connect a customer with a supplier through the app or website. In Uber's case this is a person with an automobile, willing to transport passengers, and in Airbnb, anyone who would like to rent a home or room. The range of sharing economy companies is vast and includes accommodation, transportation, finance, food and telecommunications, to name a few. In this article, the author reviews the major issues around the emergence of the sharing economy, focusing on the challenges to policymakers

The second paper by Oisin Curtis and Carlo Federico Cattani, *Breaking the Cycle of Dependency: Adaptable Financing to Boost the Export of Services in Sub-Saharan Africa* explores the relationship between commodity dependence and the need for some African countries, to move out of the 'petro or one commodity developmental state' and financing for service-based export diversification. The challenges, which many nations encounter in taking effective policy interventions for structural transformation, are compounded by a fundamental, long-term failure to satisfy financial inclusion models. It is argued that despite Africa's current comparative advantage in primary commodities, it is politically and economically justified, that the individual states embark on export diversification, giving emphasis to new value added sectors and in particular services. The paper suggests that access to adaptable, flexible financing models supports economic diversification and boosts economic resilience through service sector-led growth.

In the third paper on *Longevity Matters: The Case for the Corporate Anti-Ageing*, the author aims to give an insight into the factors leading to the success and failures of corporations from around the world. It explores into the reasons why old age family businesses have seen to be more successful in facing the volatility of the economy, different political scenarios or even a financial crisis, hence achieving a life span much more than modern corporations. Furthermore, the case of Kongō Gumi is analyzed in detail whereby the reason for its success and later on, the downfall after nearly 1400 years of existence have been looked into. The article concludes by saying that a dedicated team of employees chosen based on their competency and qualification and not on gender, or superiority in age is the secret to the long life of a corporation.

The article on *Sustainable Development*: *The Uncertain Role of Tropical Forests in the Paris Agreement* includes the concept of reducing emissions from deforestations and forest degradation. These emissions currently amount to 10-12 percent of the anthropogenic greenhouse gas emissions. This being a net value from which the sequestration of CO2 by tropical forest has been deducted, the theoretical reduction from avoided deforestation could be considerably higher. However, it would be naïve to believe that reducing emissions from deforestations and forest degradation (REDD) could put a near complete stop to the complex phenomenon of tropical deforestation. A rapid exit from fossil energy sources will be mandatory, not least because tropical forests themselves are increasingly victims of climate change.

The article on *Persuasion: A Negotiator's Core Skill* is an insight into the art of persuasion. It recognizes the importance of understanding the other party's emotions. The article also looks into the various influential factors when it comes to persuasion like reciprocity, consistency, providing social proof, etc. Finally, the paper provides a comprehensive list of helpful practices as well as those that can deter you in the process of persuasion.

The article on *Chinese Strategic Systems: A View from Huawei* illustrates how this firm became a world leader of telecommunications equipment manufacturing by relying on Chinese tradition and strategic thinking. Written from a Chinese perspective, the author offers an insight on how Huawei competed in a volatile and ever changing environment by applying non-traditional management practices.

The authors' own original styles and references have been kept in order to reflect their organizations as well as the multi-cultural mix of which IUG is not only a part but also wholeheartedly endorses. On behalf of the Editorial Review Board, I take this opportunity to thank everyone who has contributed to this issue. Future issues of the *IUG Business Review* will continue to publish contemporary and practical articles and cases in international business, international relations and diplomacy, and cross cultural business communication for the benefit of the student body, alumni, faculty, and the business community it serves.

The Editor

Potential and Challenges of the Sharing Economy

Henrique Pacini* and Andy Hira**

Abstract

The emergence of the "sharing" economy through the remarkable rise of companies such as Uber, which in 2016 was worth an estimated $51 billion, and Airbnb, worth $30 billion, deserves attention. What is remarkable about such companies is that they do not own any assets or perform any services directly for customers. Instead, they connect a customer with a supplier through an internet app or website. In Uber's case, this is a person with an automobile willing to transport passengers, and in Airbnb anyone who would like to rent a home or room. The range of sharing economy companies is vast and includes accommodation, transportation, finance, food, and telecommunications, to name a few[1]. In this article, we review the major issues around the emergence of the sharing economy, focusing on the challenges to policymakers.

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[1] Examples: Accommodation: Airbnb, home away, couchsurfing, nightswapping; Transportation: Didi (China), Sharoo, UBER, safemotos (Rwanda); Finance: peer-to-peer lending websites such as Lendingclub (US) and Prêt D'Union (France); Food: Eataway, Kitchensurfing; Telecommunications: Instabridge.

Origins and Further Explanation of the Sharing Economy

As noted, the term "sharing economy" is a misnomer, since the vast majority of companies involve payment for services and profit. In the literature such models have been branded as access economy or collaborative consumption (Eckhardt and Bardhi, 2012; Hamari et al, 2015). There are several experiments such as exchanges of used items, from books to toys to clothing, including some that act as virtual libraries for collective sharing, however, these are more the exception. The sharing economy thus emerges from the further development of the internet, which is now ubiquitous due to wireless devices such as cell phones. An illustration of the size and scope of the sharing economy is given in fig. 1 (Justpark, 2016).

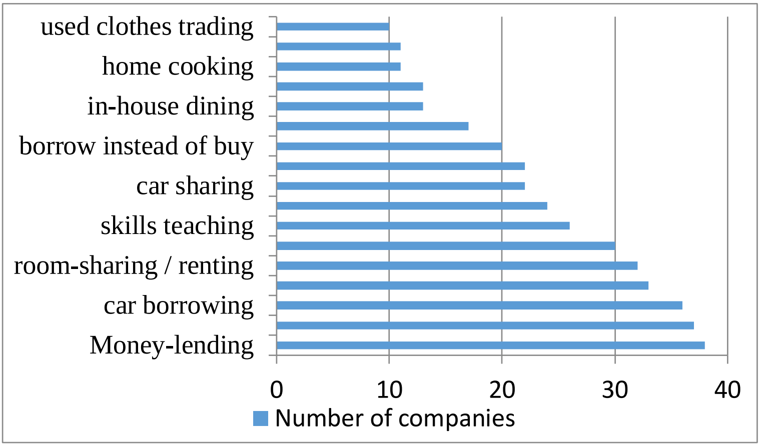

Figure 1. Number of companies operating in different sharing economy sectors. Source: adapted from Justpark (2016)

A sharing company is one that is able to use information technology to act as middleman or aggregator. Historically, this function was performed by wholesalers and retailers. The difference is that the internet now allows for the sharing economy middleman to avoid purchasing any inventory, and with individuals serving as autonomous agents, prices are often set by market forces. All the company does is bring together buyers and sellers, in effect providing a virtual marketplace, subject to some basic rules of information disclosure and safety. In a sense, the internet helps to reduce the classic economic problems of transaction costs, namely factors such as information and uncertainty that occur in any sale in the physical world. Transaction costs include the costs of company organisation and management, thus sharing economy companies can be much leaner. Barriers to entry in the market are also much smaller, as Uber drivers often don't need taxi licenses nor Airbnb hosts hoteling certifications. An optimistically biased literature around the promise of the sharing economy has arisen, including the possibility of decentralized production by millions of entrepreneurs (Benkler 2004; Rifkin 2014; Stephany 2015), while other authors see it as a new form of capitalist exploitation (Martin 2016; Slee 2015). However, as we discuss, the real picture is considerably more complicated.

At first glance, it appears that the large market capitalisations for sharing economy companies must be overvalued. It is too early to tell given the innovation involved in the companies and in business models that they operate, but there are some reasons behind the high valuations. First, given the competitive advantage that sharing economy companies have over competitors, it is likely that at least part of their growth will come at the expense of market shares from traditional providers. This competitive advantage lies, in essence, in the fact that sharing economy companies can shift a great deal of business risk from themselves to their partners and users (Malhotra and

Van Alstyne, 2014). Second, there is a pattern whereby being the first sharing economy in a space seems to give the company privileged market positioning. The company becomes the "go to" app for customers wanting a certain good or service. Similarly, the company develops a list of suppliers and loyal customers that makes it much harder for new entrants. Some argue plausibly that internet-based companies create an advantage through size, because bundling of information and services has elements of scale economies (Bakos and Brynjolfsson 2000).Third, the design of the software, its user friendliness, and intellectual property protections are features that slow down the possibility of easy imitators. Fourth, by largely eliminating the problem of inventory and giving clients direct access to suppliers, the sharing economy allows for flexible and customised production. This has led some to frame sharing economy under circular economy theory, bringing about better energy and material efficiencies (thus improved environmental performance) by making better usage of empty building spaces and existing vehicular fleets, for example (Lacy and Rutqvist, 2015).

While it may seem that the rise of sharing economy companies such as Uber is something new, we should remember that the initial sharing economy companies go back several decades, such as Amazon, the ubiquitous on-line retailer, founded in 1994, E-bay, seller of used items, in 1995, and Netflix, the on-line movie and TV streaming service, in 1997. We can expect that as software developers innovate, the sharing economy will continue to expand into new sectors[2]. Despite efforts by some jurisdictions such as New York to halt the use of sharing companies such as Airbnb, it seems inevitable that such models are here to stay, given the growing level of consumer support those businesses enjoy. The closing of video rental companies

[2] The latest wave of sharing economy business can be at least partially attributed to innovations linking geolocation technologies (GPS and alike) to wireless mobile devices, which allow location and time-sensitive businesses to operate.

such as Blockbuster and millions of bookstores shows that the internet is transforming the economy. The key word is disruption; the sharing economy will disrupt and help transform the existing economy. In the rest of the article, we focus on three key disruptions and the challenges to policymakers.

2. Impact One: Effect on Traditional Competitors

The immediate effect is the loss of jobs in traditional sectors. Much of the row over the expansion of the sharing economy is related to traditional sectors faced with higher transaction costs for the reasons noted above. Traditional companies, such as taxi services, often must buy and service their assets, provide a dispatch centre and administrative management, and offer long-term employees benefits such as health care and pensions. Companies such as Uber rely upon drivers to provide and service their own autos, thus considerably cutting such expenses. Dispatch is mediated through the software, eliminating most administrative jobs, outside of software management, updating, and operations research. While a centre for handling customer and driver issues is needed, that is also true of traditional companies.

Sharing economy competitors should have a natural competitive advantage. For example, Uber drivers can dispatch as needed, and new drivers called to the road through a dynamic pricing system, reducing idle driving time (Krueger 2016). However, the issue has become far more contentious in practice. For the most part, regulations regarding sharing economy companies are a work-in-progress. Thus traditional companies such as taxis, who have to complete regulatory requirements such as unionised pay, background and safety checks for drivers and vehicles, fare schedules and sometimes route limitations, have complained about unfair competition. The same discussion has arisen around accommodations. Hotels, seeing shrinking demand, point out that Airbnb and the like do not have to meet the normal safety and cleanliness regulations, workplace requirements, or customer guarantees as per figure 2

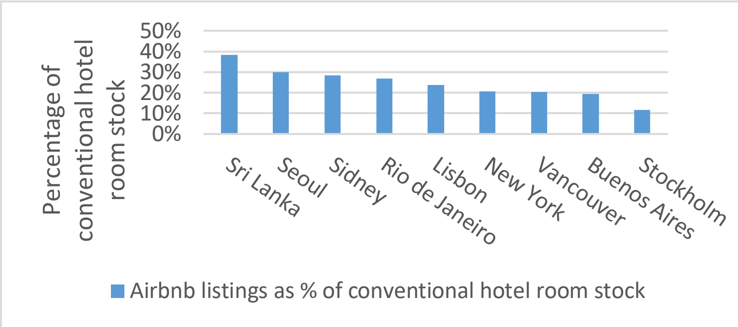

Figure 2. Airbnb listings as a percentage of the conventional hotel room stock, for selected cities and regions.
Sources: based on Tomslee (2016) National Tourism Boards.

The occasional stories of an Uber driver committing violence or a kidnapper using Airbnb raising alarm bells for the public and are good fodder for this argument. Traditional sectors are therefore pressing regulatory authorities for either the banning of such services, or if that fails, new and "fair" regulations be placed on sharing economy companies. The first reaction of sharing companies is a further distribution of risk, as they suggest the suppliers, not they, are responsible for following any regulations (Guttentag 2013).

Traditional sectors raised concerns on the lack of quality standards under which sharing economy companies operate. The latter have reacted, not surprisingly, largely by suggesting that self-regulation occurs. They use on-line ratings systems for sellers, and sometimes for clients where the quality of the service can be registered by clients through grading and reviews. Thus, poor service will lead to customers moving away from such sellers. But the reliance on on-line ratings systems is fraught with problems, individuals can rig the ratings through phony entries; a few entries in a negative direction can skew the movement of clients away; and aggregation may not reflect how certain types of clients felt about the service (Josang et al, 2007). In other words, such aggregation works best where the product or service is undifferentiated and there are large numbers of similar clients, but is more challenging when different clients would like adaptations of the same type of product or service. Some companies such as general purpose rating Yelp have reacted by attempting to ensure that each entry is tied to a unique user, but there are many issues with such systems (Jøsang et al., 2007). Some companies, such as Lyft, a competitor to Uber, have tried to offer differentiated service by providing greater background checks on their drivers.

3. Impact Two: Effects on Labour Markets

As alluded to above, a second, less clearly articulated concern has taken root in reaction to the expansion of the sharing economy. Relatively low-skill, common service jobs such as hotel desk clerk or taxi driver have long served as conduits for income mobility for marginalised groups, particularly immigrants. The sharing economy requires the ownership of assets, thus squeezing out participation from lower income groups. In theory, lower income participants could pool their savings and purchase an asset that they could then jointly operate, but thus far, we have not seen such efforts on a wider scale. Sharing economy companies also make the argument, with some merit, that allowing for non-traditional suppliers can expand supply to marginal groups. For example, routes not well served by public transportation and where volumes are too low or sporadic to allow for cost justification, could be more easily served by local drivers willing to take care of demand as it arises. Similar claims are made about accommodations that sharing opens up the possibility for lower income clientele who could not afford a normal hotel to travel more and earn more through rentals to peers. Conventional industries are by contrast more costly to trade in, as seen by license and additional fees associated to the purchase of a taxi, versus the lower costs of a private car as used by Uber drivers. Yet, workers in sharing economy have a minimum level of IT literacy, which means such work opportunities are not available to the unskilled.

A secondary effect of concern is the casualization of the labour force. By this, critics refer to the fact that sharing economy companies can use a part time work force on an as needed basis, and avoid the usual costs of benefits and overtime. Because they can also use a dispersed supply base, sharing economy companies make the possibility of unionisation far more remote. In short, thus far the sharing economy appears to move more power into employers' hands, in particular as sharing economy companies, who are relatively few in number, operate in oligopoly-like conditions, setting the rules for their business partners[3]. As with every other issue in the sharing economy, there is a counter-argument.

Sharing economy companies point to the opening up of the workspace to a more flexible labour force. Workers can do multiple part time jobs. Those, such as stay at home moms, who have only limited time available, can work when it is convenient. Students can work seasonally when they are out of class. On the other hand, the sharing economy could act as a social absorber in scenarios of aggregate economic slowdowns, such as the case of Brazil, which has seen the number of Uber drivers grow 30% per month during the economic contraction of 2015-2016 (Globo, 2016).

The challenge to the regulatory authorities is thus how to preserve basic safety and benefits standards for workers who are full time without losing the increased flexibility for part time casual workers. The challenge is made even greater by the fact that some services, such as legal, accounting, and consulting

[3] An example is Uber's commission on partner's payouts, which range from 20% to 30% of earnings (Quora, 2016).

services, can be done anywhere. For example, Amazon's Mechanical Turk site offers jobs, such as programming or data entry can be done anywhere around the world.

4. Impact Three: Access to Services and Goods Expands

One of the biggest benefits of the sharing economy is the potential reduction of the limitations of distance. As noted above, there are jobs now that can be performed anywhere there is internet access. This potentially allows for the greater participation of remote communities in the economy, and reduces the need for investments in public infrastructure to create access. Perhaps an even greater benefit is the possibility to reduce consumption through reuse and recycling, giving a circular dynamic to the economy (EMF, 2016). For example, the US Company Terracyle (see Hira forthcoming) takes used juice containers from schools and makes them into new products such as bags. The spread of car co-ops and bike sharing means that some city dwellers no longer need to purchase a vehicle; they can simply book it when they actually need it. The fact is that some durable, expensive, and environmentally costly goods such as autos are used only a small fraction of the day (Katzev, 2003). The rest of the time, they sit unused in parking lots. Thus the internet, by reducing transaction costs, can allow for the use of assets throughout the day, freeing up parking spots in the process. Companies throughout the world are increasingly using ridesharing apps so that employees from disparate branches or different companies going to the same destination can share the costs. This, in turn, could drastically reduce congestion. Of course, it will also mean a secondary reduction in demand for traditional durable products. In most cases, the internet expands choices for consumers everywhere, particularly for used items. While effects in Western countries may be deleterious to some labour markets, such as programmers, it offers new avenues for workers in the developing world.

There are, furthermore, some noble experiments with low cost items to move towards genuine community building and sharing. As described by Hira (forthcoming), several new companies have sought to feature artists or artisans who lack the means of publicising their work. Some create virtual spaces where low cost items such as books can be shared. Others organise communities around joint projects, such as tutoring lower income neighbourhoods, cleaning up the environment, or lobbying for public goods. In many cases, people offer a variety of services for free or nominal fees to each other, thus to some extent bypassing traditional service providers such as education or parks management. Perhaps the most interesting experiments are ones such as Vancouver's car co-op, where members pool capital and service the assets through a non-profit management structure.

5. Limitations

While transformative, the sharing economy also faces obstacles and limitations beyond those previously discussed. The most obvious is that it depends on internet access. There are large parts of the world, and marginalised populations in the West, with limited or no access to the internet. According to the World Bank, in 2014 just 6.4% of Afghanistan's population had internet access; even in China, 49% did.

The second limitation is the apparent correlation between growth of sharing economy businesses with the overall trust and safety in regions where they thrive. Car-sharing applications such as Mitfahrgelegenheit and BlaBlaCar have been very successful in Europe for over a decade. At the same time, in Brazil drivers have been reluctant to rent their car seats due to safety concerns, even in highly developed areas such as Sao Paulo, where BlaBlaCar arrived only in 2015 (Exame, 2015). It can be challenging to convince some that a stranger will behave well in your car or spare bedroom, or that the unknown perso will use your Wi-Fi connection responsibly and not for criminal acts.

The third is evident from the above discussion but worthy of further analysis. That is, the internet is disruptive of some sectors of the economy, but has more limited effects in others. We still need to visit doctors or dentists in person to get their services, for example, since telemedicine cannot cover the full spectrum of physical ailments. Remote or marginalised communities are likely to face a shortage of such services, even if they can access multiple recommendations. In line with that, internet access goes hand in hand with a certain amount of disposable income. Thus, to access the sharing economy, one ironically needs to own a certain level of assets/income. In a sense, the promise of the sharing economy for the marginalised is still quite remote. Even with internet access, the user needs a minimum amount of capital and especially computer literacy.

One of the more interesting areas where the sharing economy has reached marginalised populations is in peer –to- peer lending. Much of the world's population in the developing world lacks access to financial services. In Kenya, a UK telecoms company, Vodafone, has developed a peer -to peer-lending vehicle, M-Pesa, whereby for a small transaction fee, buyers can electronically pay sellers with a touch of their cell phones (Johnson and Arnold 2012). The service has allowed millions of Kenyans who lack a bank account to participate in the economy in ways previously unseen. The genius of M-Pesa is that it relies on cell phones, allowing for remote and cheap usage, as the cost of phones has dropped dramatically to less than $5 at the low end. However, it has been difficult to replicate M-Pesa in other countries (Heyer and Mas 2011). There is no clear answer why, but part of the resistance can rest on traditional financial institutions.

There are several other challenges revealed by the M-Pesa case. The main one is that even if cell phones are cheap, service is not. Users still need affordable access to Wi-Fi and that, in turn, depends on the market structure for wireless providers. [4] Secondarily, we have seen that first entrants such as Amazon tend to acquire a monopolistic position in the marketplace. This means that competition from other sites could be stifled through buy-outs. Perhaps surprisingly, large segments of the internet economy seem more prone to oligopoly rather than perfect competition. For example, reports of Uber raising drivers' fees and consumer pricing considerably during peak demand raises questions about how elastic the supply really becomes through the sharing economy (Slee 2015). It is not yet clear, furthermore, whether the promise of serving marginalised communities and clients is lucrative enough to create new sharing economy service providers. There are widespread concerns that without direction, the sharing economy can have negative effects in secondary markets. For example, there are many contentions that Airbnb leads to a reduction in the number of rental units.

[4] Initiatives that promise to increase low-cost internet coverage, but at the same time risk internet neutrality by conditioning user access to specific sites or providing unlimited bandwidth only to specific websites, can also threaten the development of sharing economy businesses, which need unconstrained internet access (Futter and Gillwald, 2015)

Criteria	Conventional business models — Strength	Conventional business models — Weakness
Labor	Regular and predictable wages Collective bargaining possible Not dependent on IT skills	Bureaucratic, expensive rules highly taxed, more expensive Barriers to hiring and dismissal Companies have most of the business risk
Competition	Protected by barriers to entry Often regulated prices (e.g. taxis) Standardization	Small flexibility Slow to innovate
Access to goods and services	Predictable supply and demand Fomal channels for dispute resolution Broad service provision	High cost, limited budget options Dispute / review system often slow or innefectual
Government revenue	Well established taxation structures	Cost-pressure due to taxes and licenses Heavy taxation of labour

Criteria	Sharing / Access / Circular models — Strength	Sharing / Access / Circular models — Weakness
Labor	Flexibility Ease of entry and exit from market IT-smart workforce	Difficult to unionize Lack of automatic pension / insurances Workers have most of the business risk Require IT skills
Competition	Competitive /dynamic prices More diversity in offerings Few barriers to entry	Clashes with conventional sectors Operates in blurry regulatory environment Less standardizationUncertain supply reliability
Access to goods and services	Highly dispersed, geographic proximity More budget offerings Custom or tailored offerings Self-regulation via review / rating system	Uncertain reliability of supply Limited coverage in non-economic areas Discrimination
Government revenue	New taxation opportunities and models Formal business licenses often not required	Blurry taxation rules Risk of revenue offshoring

Conclusion

As the sharing economy is here to stay, there is urgent necessity of policy and regulation to guide its growth. Issues such as safety, workers' benefits, and anti-trust are clearly at the forefront and require serious regulatory review and proposals. The decline of traditional economy sectors could be eased by differentiating levels and types of service through regulation, and by improving inter-sector competitiveness by streamlining regulations. For example, users might see the use of a traditional London taxi as a premium service, with the ability to charge higher rates given the new level of competition. Drivers could be trained to offer additional services such as tourist information that a casual driver would lack. Oligopolistic tendencies also raise the spectre of worker exploitation. Regulation regarding minimal safety standards for vehicles and background checks for drivers as well as liability insurance would go a long way towards helping the sharing economy to grow.

Perhaps even more concerning to public authorities is the difficulty in taxing sharing economy activities. Traditional providers rightly complain that they are usually subject to greater taxation, such as hotel taxes, that sharing companies avoid. Beyond the competitive concerns, the loss of public revenues is a serious issue. The regulatory authorities that govern such conditions need to be up-dated to include sharing economy companies. Because transactions are between buyers and sellers, it can be quite difficult to monitor whether taxation and regulations are being observed. To do so would work against the promise of decentralized and individually competitive supply. The easy fix to have the aggregator, Airbnb in this case, pays a commission is resisted as it goes against their purported role as secondary to the transaction itself. Therefore, a wholesale rethinking of regulations is sorely needed, with streamlining and efficiency as key drivers (Miller 2016).

Policy could also be pro-active to take advantage of what the sharing economy potentially offers. For example, public infrastructure, such as a Wi-Fi-enabled subway terminus, could serve as a hub/meeting point for sharing economy drivers, then move their clients on to more remote locations. The city of Sao Paulo has adopted a model in which Uber drivers pay a fixed city-tax per kilometre driven when with passengers, stimulating public authorities to facilitate such service. The usage of public infrastructure could allow private operators to differentiate further the types of vehicles used in transportation, giving a greater role for smaller vehicles that adapt their routes based on demand.

Some municipalities, such as Paris, have gone further and actually started their own sharing businesses, such as bike sharing. It is still unclear whether this is optimal for public ownership, concession, or for private companies to offer such services. On the one hand, like most shared infrastructure, in this case public spaces and roadways, it would be inefficient to have multiple competing operators. However, because so much about the disruptive force of the sharing economy is unpredictable, flexibility in markets is essential. Changes in demographics, usage patterns or growth in certain corridors require adjustment, and the public sector tends to be less sensitive to such adjustments. If sharing leads to the liberalization of labour markets, it does not mean that would be entrepreneurs should lose all social safety nets or protection; on the contrary, moving regulation towards basic standards of protection of workers in the internet economy will help it grow even faster and make it more inclusive.

One can certainly make the argument for a pro-active approach to encouraging the sharing economy, and even co-ops, within under-served and marginalised areas and populations. This begins with seeing access to the internet as an essential service and observing principles of internet neutrality in developing countries, as well as strengthening IT literacy skills in school curricula. Public investment in infrastructure may be necessary, as well as well-designed regulatory guidance around the telecoms sector. As we see with the example of M-Pesa and Uber, the disruption of industries is rarely smooth and often resisted, even when it is aimed at populations not served well by traditional providers. Insulation from lobbying by both traditional and sharing providers is essential for efficient and balanced regulations to emerge.

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Breaking the Cycle of Dependency: Adaptable Financing to Boost the Export of Services in Sub-Saharan Africa

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Abstract
This paper explores the relationship between commodity dependence and the need, in particular for some African countries, to move out of the 'petro -or one commodity- developmental state' and financing for service-based export diversification. The challenges, which many nations encounter in making effective policy interventions for structural transformation, are compounded by a fundamental, long-term failure to satisfy financial inclusion models. It is argued that despite Africa's current comparative advantage in primary commodities, it is politically and economically justified that the individual states embark on deep export diversification, giving emphasis to new value added sectors, and in particular services. The paper suggests that access to adaptable, flexible financing models supports economic diversification and boosts economic resilience through service sector-led growth

In the fifteen years since the culmination of the Angolan civil war (1975-2002), the ruling MPLA party was led by Jose Eduardo dos Santos since 1979 - has capitalised on the nation's abundant natural resources to attract investment and turn the former socialist state into one of the world's fastest growing economies. Predicated on crude-oil exports (80% of the country's revenue) and trade taxes (tariffs), Angola succeeded in growing at an average rate of 9.93% over the period 2000-2015.

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The conclusion of this resource-induced growth cycle came with the slowdown of the Chinese economy. For commodity dependent nations, such as Angola and Libya each relying heavily on tax revenues to sustain government revenues, the subsequent decline in foreign investment and the downturn in commodity pricing (African Development Bank, 2016), increased the likelihood of significant revenue shortfalls and a greater fiscal imbalance.

Between 2013-2015, Angola's public and budget deficits continued to deteriorate due to weakening terms of trade and a decline in oil windfall (47% of GDP, 98% of exports and 79% of fiscal revenue) (BNP, 2016). As a percentage of GDP, revenue declined by 16% and the fiscal position deteriorated from a 0.3% surplus (2013) to a deficit of 1.6% (2015). Despite the economic costs of extracting oil at a time of high price volatility, efforts to reform the political economy inaugurating the transition from rent-seeking behaviours to service-led growth remain limited by the degree to which they can balance market reform with political expediency (Vine, 2016).

Such subdued efforts at debt restructuring and structural reform, in the face of volatile commodity pricing, are by no means particular to Angola. Rather, the Angolan experience is emblematic of the litany of competing interests and fundamental difficulties in structural transformation that many African states face, as they attempt to evolve into 'petro-developmental states' (Ovadia, 2016).

Despite a post-crisis dip in prices, the price surge of the 2000s led half of developing countries to increase their commodity dependence between 2009 and 2013. In 2008, it was estimated that of the 141 developing countries, 95 allowed primary commodities to be in excess of 50% of their export earnings (UNDP, 2011); by 2012-2013, two thirds of all developing countries were considered 'commodity dependent'. Denoted when commodity export revenues contribute to more than 60% of total export earnings, an estimated half of all ‘dependent’ nations are now located in Africa (UNCTAD, 2015).

The cyclical behaviour of commodities namely, boom and bust cycles and the increases in price volatility (rising 175% from one decade 1990-2000 to 2000-2009), in addition to the high dependency of low-income nations on just a handful of commodities, places these dependent countries at risk of price shocks and increased budget deficits. Despite a retrenchment of commodities in total exports during the period 1995-2000, the share of primary exports in total exports increased to such an extent that by 2012/2013, UNCTAD estimated that 85% of LDCs were commodity dependent.

Commodity dependence creates systemic risks, while the short-term impacts (i.e. falling export earnings, currency depreciations and critical budget deficits) threaten to undermine the transition of developing and LDC markets to middle-income status (i.e. becoming a ‘petro-developmental state’). The nationalisation of commodity resources has embedded volatility at the heart of developing nations by consolidating the centrality of commodity price booms in national expenditure and the demonstrated use of cyclical, commodity dependent spending.

The declining long-term trend in non-oil primary commodities creates serious terms-of-trade issues for producer nations. The need for ever-increasing volumes of production necessary to offset decreases in efficiency further destabilises pricing and threatens to weaken the debt sustainability position of the producer economy. Accordingly, this declining terms-of-trade amongst the non-oil exporting countries of Africa amounted to lost revenues in the region of an estimated 119% of their combined annual GDP (UNDP, 2011; World Bank, 2003).

To get out of the precariousness of such reliance, it is necessary to effect structural transformations that diversify the export portfolio of developing nations and lessen the critical importance of individual sectors in national expenditure. Nurturing and facilitating the creation of services is an important part of the transition to export diversification and a complement to efforts of adding value to existing sectors.

In isolation, policies that look to structurally transform commodity-dependent economies to generate greater levels of 'shared value creation in extraction' fail to diminish the cyclical risk of pricing volatility. By reorienting the focus of commodity extraction to 'whole of society' benefits, policymakers overlook the threats of (i) price volatility (boom & bust) and (ii) exogenous economic shocks that remain an inherent part of commodity-dependence. These threats far outweigh the short-term monetary benefits to communities in times of high growth, as their long-term resilience would remain contingent on positive exogenous growth leaving them susceptible to external shocks.

As export concentration remains fundamentally detrimental to economic growth, a reorientation of policies is required to lessen the vulnerability of countries to volatile pricing and improve the long-term growth capabilities of developing economies. Upstream economic activities in skill-based and technology-induced exports present a viable platform for economic development and effective linkages with global markets. The development of skill-based service exports (including financial services), challenges rent-seeking behaviours and creates improved growth potentials and a range of positive externalities.

Effective structural reform (i.e. transformation) faces a significant challenge inherent in the distinction between financial depth (the amount of money) and financial inclusion (the access to affordable capital). In going beyond increasing financial depth, we recognise that depth (i.e. deep financial sectors) alone can exist in perfectly inequitable forms for example, in the event that financial access remains predominantly for the wealthy. The task to enable financing that creates inclusive service growth, and facilitates a transition away from commodity reliance, is supported by research findings. The findings (i) demonstrate the negative correlation between indicators of financial depth and levels of income inequality, and (ii) the strong positive correlation between effective financing and long-term, sustainable economic growth (i.e. free from commodity induced contagion, price volatility) (CGAP, 2012).

Completing this necessary structural transformation (i.e. the creation of a sustaining service sector) remains a difficult task, by:

(i) mitigating the exogenous economic impact of a ‘triple threat’ (i.e. continued financial shortfall, high inflation and volatile commodity pricing), that threatens to stifle sub-Saharan African markets, and

(ii) (ii) the cultivation of financing channels that lessen the importance of commodity revenue in national expenditure.

In 2015, economic activity in Sub-Saharan Africa stumbled to its lowest level in 15 years, falling from 5.1% in 2014 to 3.4% in 2015. On account of a combination of economic threats (i.e. capital constraint, escalating inflation and commodity price shocks), commodity dependent nations are now at risk of (i) increased budget deficits and (ii) diminished terms-of-trade. At the global level, the concurrent shocks of continued financial shortfalls, added to high inflation and volatile commodity prices, strongly impacted Angola, Nigeria and CEMAC (Economic

Community of Central African States) nations. These economic imbalances highlighted existing contextual vulnerabilities (economic and political), which obliged governments to reorder their economic structures (i.e. away from commodity dependence) to ensure greater market resilience (IMF, 2016).

The presence of double deficits (a fiscal and current account deficit) in many Sub-Saharan nations, in addition to deteriorated terms of trade, has further emphasised the presence of economic imbalances and the need for efficient, adaptable financing, at a time when institutional borrowing remains limited (Sy, 2016). The layering of risks and the exposure to rapid contagion amidst increasingly connected financial systems, poses particular systemic hazards to commodity-dependent economies throughout Sub-Saharan Africa; let's recall that fuel, metal and mineral exports constituted 62% of the region's exports over the period 2010-2014. In addition to the broader regional slowdown, the persistent adverse economic concerns of non-performing loans, declining bank sector profitability, and diminishing capital adequacy ratios, are found to further affect the poorly diversified, commodity-dependent economies of Angola and the Republic of Congo.

Advocates of competitive advantage recognise that the optimum level of product specialisation (i.e. export concentration) varies across commodity dependent nations. Nevertheless, as the gains of trade from commodity exports fluctuate over time, the sustained export concentration of such volatile products is typically seen to diminish as an economy develops. This restructuring occurs through the greater diversification of a country's export base.

Contrary to the belief that opening the productive structures of an economy increases the likelihood of external economic shocks, empirical evidence demonstrates that the productive structure of a country tends to be unstable, when the economy is dependent on highly volatile exports (Koren & Tenreyro, 2004). Accordingly, as the scale of impacts is decided by the degree of diversification within the export base, the question for policymakers is to what extent they can stimulate their commodity-oriented economies to mitigate export-earning shocks, expand export revenues, and create added-value without economic diversification.

From the perspective of African export concentration, an examination of the trends demonstrates that the region has registered the highest export concentration ratio throughout 1995-2008 (UNDP, 2011). Empirical examinations of the relationship between export concentration and revenue volatility demonstrate that continued sectoral dependence increases exposure to sector-specific fluctuations. As the high export concentration, country grouping also possesses the highest relative deviation in export earnings (Ibid.), the decision to pursue policies that compound efforts to diversify must be understood by their subsequent effect in reducing growth levels and increasing vulnerability.

With respect to the implications of export concentration on service sector development, the dependence on strategic imports creates an implicit vulnerability in the pricing and availability. The domestic demand for services has grown in recent years such that the trade in services deficit increased 16% between 2010-2011, rising from $36.5 billion to $42.5 billion (UNCTAD, 2014a).

As economists have demonstrated, the link between innovative export diversification, business facilitation, and market externalities is growing increasingly complex. With respect to increasing domestic service exports, the problems for policymakers in taking effective measures lies in understanding (i) the linkages between the contraction in economic activity on account of the secondary effect of depressed lending and (ii) the increasing dependence of least developed markets on external forms of finance (i.e. aid, debt and remittance payments).

Effective export diversification requires consideration not only on delivering a range of products, but on the financial facilitation and business support necessary to correct market failures (e.g. failure to extend financial inclusion); thereby allowing for greater levels of export competitiveness and intra-regional trade. Accordingly, innovation and efficiency in export diversification are increasingly linked to a sound understanding of market externalities.

The Role of Services in Redressing Unbalances

At an individual level, countries who have instituted dynamic service sectors, such as the Rwandan economy in which services account for 48% of GDP (National Institute of Statistics of Rwanda, 2015) have demonstrated greater resilience in private lending and witnessed a lower degree of decline in the post-crisis years (UNCTAD, 2013). Accordingly, in the economies of Rwanda, Tanzania and Kenya, private credit has actually improved throughout the period, with 15.7% in 2015 and 12.5% in the first six months of 2016 (Overseas Development Institute [ODI], 2016).

This contraction in economic activity has had the secondary effect of depressing lending and threatening the financial stability of parallel sectors throughout the economy. Countries with dynamic service sectors, such as the Rwandan economy in which services constituted 47% of GDP (RDB, 2010), have demonstrated greater resilience in private lending and witnessed a lower degree of decline in the post-crisis years (UNCTAD, 2013). Accordingly, in the economies of Rwanda, Tanzania and Kenya, private credit has actually improved throughout the period, with 15.7% in 2015 and 12.5% in the first six months of 2016 (ODI, 2016).

In its 2016 Economic Outlook report, the IMF describes how service development supports economic growth and reduces regional volatility. By accelerating structural transformations and digital capabilities, these services can enhance market depth and stabilise economies, reducing the need for commodity dependence. A decade earlier - and taking the notion of service sector synergy as their basis, a publication from the International Trade Centre (ITC) (2006) estimated that information and communication technologies would become pivotal to an emerging form of efficient financing. This technologically dependent form would accelerate financing opportunities, generating strategic support for countries looking to diversify into 'petro developmental' statehood and enabling inclusive service export growth. As the publication forecast, 'services will be provided by SMEs, not just large enterprises rendering it possible [for them] to sell their services from anywhere to anywhere'. In 2013, the global exports in service rose by 5.5% to a figure of $4.7 trillion (UN DESA, 2015).

The proliferation in access to innovative, 'home grown' financial instruments and digital channels (i.e. online banking or financing services) across emerging economies has challenged the historical barriers of remoteness and resulted in a strong increase in the financial inclusion of service exporters, such that the emerging market share of trade in service exports reached 30%. This growth in the proliferation of diverse, indigenous forms of financing both traditional and innovative in nature has accelerated the access and scale of financing available to domestic service markets, at a time when the global financial crisis has put a brake on traditional institutional funding channels. By contrast, the immediate effects of the global financial crisis on emerging economy financial service sector stability has been moderate, and the soundness of regional financial institutions has broadly improved a reflection of the regions relatively low financial integration.

In an attempt to meet the capital requirements of the service sector, financial analysts have advocated for an inherently flexible, adaptable form of financing. The application of this fluid combination of mechanisms (traditional and innovative), is based on the belief that mixed modality possesses the means of stimulating financial inclusion and service sector growth. In addition to creating a more capable financial system namely, one that can better mitigate exogenous economic shocks the application of adaptable financing channels increases capital volume and instrument efficiency. By enabling service exporters to meet their lifecycle financing needs in a manner of their choosing, the process of accessing and accepting financial services matures, such that adaptable financing has the ability to lessen the imposition of predatory terms or undue levels of assumed risk.

The emergence of Pan-African banks has led to a material change in the landscape of sustainable service sector financing. This evolution in indigenous forms of traditional financing has improved domestic financial inclusion capabilities and facilitated greater integration with existing financial systems, many of which are innovative in nature. Pan-African banks appear capable of reducing historic inefficiencies in regional capital provision, drive the domestic financial inclusion of service providers, and augment the very nature of domestic lending. On this historic imbalance, the 2006 ITC report cautioned, the 'desires and standpoint of exporting SMEs and banks are diametrically opposed'. Such is the unprecedented scale of change in the past ten years that pan-African institutions not only now possess the potential to strengthen the ties between indigenous financing models and service exporters, but outweigh their traditional American and European predecessors by overall scale of operations[1].

[1] Ecobank, Stanbic and UBA are typical large African banking groups.

For low-income countries such as Togo, Niger and Guinea-Bissau [2], Pan-African institutions[3] have come to constitute the majority of foreign capital. As the leading arrangers of syndicated loans across the region [4], these banks challenge foreign capital dependence and mitigate the risks of localised economic shocks, whilst simultaneously generating positive impacts such as increased competition amongst financial lenders and greater international linkages[5].

The imposition of sound, top-down regulatory mechanisms is a prerequisite in commodity dependent nations, to ensure service exporters receive the positive support of Pan-African institutions. Failure to guarantee the requisite levels of oversight or security in the mobilisation and allocation of finance can prove detrimental to the service export market, such that in the event of a global shock, the presence of institutional finance can propagate exogenous risks and negatively influence the financial stability of service exports.

[2] Though the establishment of subsidiaries in these host countries increases competition in the provision of debt financing mechanisms and financial services (i.e. leasing, microfinance, cash transfers, accounting practices) to the Service export market, the consolidation of capital in financial institutions, operating across borders, in markets characterised by their inherent lack of financial depth or sophistication, poses significant risks.

[3] Presently, there are 7 Pan-African banks with a presence in ten or more countries;

[4] Whilst commercial bank and ATM penetration rates have risen across the Sub-Saharan African region during this time, regional banking penetration rates remain below the global average, in the region of 36%.

[5] Togo's Ecobank now renders banking services across the continent. With cross-border operations in 32 countries, it represents the most diffuse, indigenous financial institution.

To date, the benefits of Pan-African banking (with regards to financing services), have been positive but sporadic, limited by existing market structures, country stability, and public sector willingness to embrace competition. Regrettably, for many Sub-Saharan countries - namely, those with weak institutional frameworks and prone to upheaval such as Sudan, Niger and the Democratic Republic of Congo - financial inclusion remains too narrow, limiting the opportunities for service export growth or development.

The growing, regional success of the service export market dependent on the relationship between strong domestic institutions, low-cost technologies and efficient financial inclusion has served to redefine the commercial viability of financing services in emerging economies. In the absence of structural or regulatory changes permitting an acceleration in institutional and bank lending, service providers in poorly diversified markets have begun to leverage varying forms of adaptable, efficient financing to assist in expanding their trade capabilities.

As a consequence of the composite nature of service exports, the financing instruments most capable of meeting their lifecycle needs are a combination of traditional and innovative financing tools. Drawing on technological advancements in mobile phone capabilities and driven by the continued need for dynamic modes of financing for service growth, innovative financing mechanisms are often intended as reinforcement to, rather than a substitute for, the pervasive traditional financing mechanisms.

Given the minimal rates of traditional financing penetration in developing markets (e.g. open account services), the evolution of dynamic, non-traditional mechanisms goes some way to satisfying the evolving capital requirements of each constituent element of a service. For example, technology-enabled community pooling platforms (e.g. crowdfunding) allows service exporters to launch appeal-based campaigns, with the promise of reward-based or equity-based returns. As an innovative complement to traditional forms of community financing, crowdfunding enables financiers to channel investments through transparent channels and overcome historic barriers to investment, such as distance. Accordingly, service exports in remote markets (e.g. sustainable tourism, exporters in West Africa) are receiving financing for 'campaigns' ranging from the provision of transport to education and training services.

The growing sophistication and ubiquity of innovative platforms has challenged historical assertions on the role and expectations of traditional financial models. Where it was once common to finance hardware via traditional channels, mainly banks, innovative platforms such as funding from equity partners in crowdfunding platforms or venture capitalists are changing the landscape by appealing to a host of non-traditional tools and processes. Whilst taking many of the understandings first instilled in traditional financing (i.e. community pooling, person to person financing, expert investment), these mechanisms look to mitigate the inherent limitations and risks associated with traditional financing (lack of collateral, moral hazards, non-payment) whilst simultaneously deriving support from a new class of investors not related to conventional institutions.

Drawing on the interest of amateurs and experienced investors alike, non-traditional financial services offer a variety of platforms (i.e. crowdfunding, venture capital), which cater to investor capital levels, expertise and the individual rationale for investing. The presence of digital peer-to-peer functions and the requirement for simple technologies opens many of these platforms to a new, often financially inexperienced audience of service exporters. Customary impediments such as minimum capital holdings or high transaction fees are moderated as negotiations become two-sided (i.e. bilateral) in nature; avoiding the top/down culture of institutional lending and reconstituting it in a comparatively egalitarian digital ecosystem. In combination with these innovative financing mechanisms, digital technology is introducing a new demand for how financial services are delivered and, by extension, how structural transformation and economic deepening occur.

As a progression of digital online banking (a term that has existed for two decades and largely describes a novel sideshow from branch banking) and fundamental payment systems, digital financial services fully recognise the environmental changes (i.e. customer penetration, online volumes, mobile growth, digital preference, customer experience). That spelled an explosion of new service offerings and a digitization of bank services. The evolving preferences of service exporters are driving the effective delivery of financial products and services to the digital realm.

Despite the disruption to traditional financial structures, this is a unique opportunity for financial players (financial institutions, micro finance institutions, non-financial actors) to reorient their relationship with users and elaborate service propositions (i.e. digital platform) enabling customers to meet their financial requirements, in a proactive and sustainable manner. New innovations within the field of digital financial services (such as branch-less banks, mobile deposits and mobile wallets) ensure that the adoption of digitally-enabled financial services is a clear opportunity for financial providers to deliver financial services through a consistent channel, which deepens the user relationship and drives the ability of providers to more effectively deliver high-value financing mechanisms.

The root of the evolution of this ecosystem is the rapid increase in the availability of mobile phones. In 2014, an estimated 80%

of adults in emerging economies had access to a mobile phone, while only 55% had financial accounts (McKinsey, 2016). Given that 90% of individuals in emerging economies have access to a network, there exists a given capacity to engage digital financial services (DFS) and establish new financial 'points of presence' outside of the traditional banking structures.

Within this ecosystem, internet-enabled devices facilitate the delivery of a range of digital financial services. Digital financial services (DFS) denote the use of digital technologies (internet, mobile communication technology) to access financial services and execute financial transactions. This includes both transactional and non-transactional services, such as viewing financial information on an individual's tablet or mobile phone. Given its broad categorisation, DFS encompasses mobile financial services and all branchless banking services enabled via electronic channels (Alliance for Financial Inclusion, 2016).

In the broadest sense, DFS offers the following financial services for service exporters:

(i) payments person-to-person, business-to-person, merchant payments and cross-border payments),
(ii) (ii) transactional banking (formal financial services, account services, financial advisory services),
(iii) (iii) savings and credit (access to credit, mobile money platforms allow for the distribution of loans directly to a user's handset) and (iv) business and private insurance (creating also financial stability) (USAID, 2014) .

Improved technological capability in less developed markets has allowed financial providers to lower their costs of outreach and expand the selection of digital financial services (DFS) on offer. This evolution in the scale of digital financial services overcomes many of the traditional barriers to capital provision and generates digital financial services innovations (McKinsey, 2016). Despite being in its relative infancy, the digital financial services ecosystem is becoming an increasingly diverse space, housing a growing range of services, products and financing channels. In addition to mobile network operators (MNOs) and microfinance institutions (MFIs), larger traditional financial institutions are entering the DFS realm, bringing with them increased expertise and capital reserves (CGAP, 2015).

The presence of large-scale financial institutions in the ecosystem has the effect of increasing the sophistication and complexity of digital financial products available to service exporters. Given their experience in the use of complex financial products (i.e. innovative financing mechanisms, high-risk traditional instruments) and increased capital base, financial institutions can offer a broader range of sophisticated, financial products (i.e. credit, savings and insurance).

Though the introduction of complex financial instruments is associated with an implicit level of risk, the variability in financial complexity and mode of delivery (channel) provides service exporters with greater dynamism. By altering both the degree of formality and flexibility associated with financing, these advanced financial mechanisms generate greater immediacy in financing. In an effort to navigate this new terrain with the greatest degree of success, large-scale financial institutions have looked to better understand the correlation between increased financial access (i.e. financial inclusion) and the improved quality of bank assets (i.e. lower percentage of non-performing loans). Early indications suggest that improved credit appraisal can lessen the number of non-performing loans in the portfolio of total loans.

The rise of challenger banks (i.e. banks that seek to challenge the dominance of large traditional institutions, be it by operating in an innovative capacity or simply offering increased personalisation) demonstrates the incentives of providing digital financial services. Challenger banks utilise online payments and banking technology to lower operating expenses, and agree integrated ‘all-in-one’ offerings for service exporters (KPMG, 2016). For example, Finnish financial institution, Holvi, occupies a purely digital space and provides online banking services that levy service exporters through transactions and payments. The bank also provides a range of non-financial services such as bookkeeping or account advisory services. Given the success of this broad range of financial capabilities, Holvi is expanding to serve a further 19 countries members of the European Union (Deloitte, 2015).

Despite the presence of competing payment providers (payment services represents a first step to broader financial service capabilities), in addition to innovative and alternative payment methods (i.e. digital wallets and mobile apps), banks remain capable of gaining competitive advantage through the building of holistic payment services. The incorporation of these services allows lending institutions to benefit from improved operational efficiency, reduced costs, and better customer interactions.

Structural transformation and, more pointedly, the achievement of comprehensive, service export growth is impossible without financial inclusion. As the financing channels provided by DFS can drastically reduce the costs for individual users and financial service providers, financial inclusion grows amongst previously underserved groups.

The transition from commodity dependent markets characterised by the relative financial isolation of non-commodity exports – to broad-based financial inclusion comes with assorted opportunities, responsibilities and rewards. When access to funding comes via digital financial channels, the transformation adopts many of the tenets of traditional financing and develops them to increase their respective accessibility and affordability, in keeping with the majority of innovative financing services.

Ending the cyclical dependence of government on commodity-based financing requires a significant, holistic effort to rectify the structural imbalances, which have facilitated the economic prioritisation of commodity exports. Though a self-sustaining, skill-based service export market represents the best means of imparting economic stability, the environmental shifts (both with respect to the effective regulatory and financial environments) necessary to induce the myriad forms of financing required for service growth require periods of gestation. Accordingly, and despite their ability to accelerate the flow of capital in the short-term, the use of innovative mechanisms is by no means a *quick fix* to large-scale financing gaps.

The old assumptions that service exports have limited potential and that they are only possible in developed markets, have slowed down the take-off of service exports in transition economies. However, the technological gains and better understandings on the expanded role of services in global trade as facilitated by the new wave of effective, non-traditional financing have accelerated the utilisation and adoption of service exports, such that developing countries are avoiding the more traditional, industry-led path to diversification. As a consequence of the reluctance of some countries to break the cycle of extractive-expenditures or simply the adequacy of existing systems (i.e. Kenya's use of M-Pesa mobile payment and the communications infrastructure) to facilitate service development, the gains realised through financing have been encouraging, albeit sporadic.

The utility of innovative financing lies in its role as a facilitator of financial barriers (i.e. cost, distance or gender). In isolation, non-traditional, dynamic financing can satisfy a broad swathe of export types and in the process, generate positive externalities across the economy. However, in order to achieve economic diversification and develop ‘upstream activities’ that challenge export concentration, adaptable financing is required. This intelligent harmonisation of traditional and non-traditional financing models, buttressed by improved access and user understanding, is the true factor of an economy’s success when cultivating a strong service sector, capable of breaking the long-term dependence on commodity exports.

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Longevity Matters: the Case for Corporate Anti-Ageing

*Thomas Frankl**

Abstract

The average life span of companies in the United States, Japan and most of Europe is around 13 years[1]*. Over the last century, the average lifespan of a company listed in the S&P 500 has decreased by more than 50 years, from 67 years in the 1920s to 15 years today*[2]*. One third of the companies featured in the 1970 S&P 500 did not exist beyond 1983. The typical manifestations of corporate fatality were take-overs, bankruptcy or break-up*[3]*.*

As far as human lives are concerned, 'quality of life' assured by mental and physical health and wellbeing needs to complement old age in order to make longevity a worthy objective. Similarly, corporate longevity, the continuous existence of companies over many decades, if not centuries, cannot be considered a worthy aspiration for their owners, unless it is accompanied by the presence of corporate health factors such as stakeholder satisfaction, continuous innovation or adequate profitability. This said, excellence might not in all cases be a pre-condition for longevity: mediocrity does not have to stand in the way of longevity if an otherwise unremarkable business is benefiting from a monopolistic position, constituting an insurmountable barrier of entry to any would-be competitor. In fact, a large number of long-lived companies operate in the tertiary sector and are located in a

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[1] Cf. e.g. Carol Kennedy, 50 and still nifty ; in : The Director, 1997 or Ellen de Rooji, A brief desk research study into the average life expectancy of companies, Stratix Consulting Group, Amsterdam, 1996

[2] Kim Gittleson, Can a company live forever? in : BBC News, New York, Jan 19, 2012

[3] Economist, Dec 16, 2004 : The business of survival

unique, attractive location: hotels and restaurants located in city centers or central business districts, in unique scenic locations (e.g. Villa d'Este on Lake Como, Italy, founded 1568) or other unique 'recreational locations' (e.g. Hoshi Ryokan hotel & spa, Komatsu, Japan, founded 718). It is primarily their unique location, which creates a quasi-unassailable competitive 'moat'[4], as long of course as the location itself retains its value. Attractiveness of location may be affected by changes in the competitive environment of businesses, e.g. a change in social preferences. Japanese *millennials* might prefer downloading a 'Spa App' on their tablet over getting their feet wet; environmental changes such as global warming may soon begin to threaten wineries such as the German Schloss Johannisberg (founded 768) whose typical grape variety might become indistinguishable from others as alcohol levels rise due to a warmer climate[5]. High-speed trains have made a major part of air travel within France obsolete[6], eroding the former quasi-monopolistic position of most of France's regional airports.

Given the decisive impact location can have on the longevity of a given business, this essay focuses on the analysis of the non-location related factors which enabled companies to survive over the long term. The paper sets out to determine which attributes and strategic choices long-lived companies have in common, i.e. which strategic decisions have contributed materially to their long-term survival in free markets. Are there any lessons to be learned from the experience of public corporations and private family businesses who may be facing

[4] Corporate Strategy jargon for competitive advantage protected from competition

[5] Napa Valley wineries have begun to reduce the alcohol content in some of their premium wines as rising alcohol levels have affected quality

[6] Except for the longest connections, e.g. Marseille – Brest ; The advent of low-cost carriers undercutting the TGV railway tariffs has since partly reversed this process

strategic decisions in order to remain competitive and relevant? What could be the nucleus of a corporate anti-ageing strategy?

A Look at Public Companies

In the early 1980s, Royal Dutch Shell could look back at almost 100 years of existence, quite unusual for one of the world's largest diversified corporations, made up of over 300 companies operating across the globe[7]. The corporate history of Shell dates back to the 1890s when its British founders started selling petroleum for lamps in the Far East[8]. The company merged with kerosene importer Royal Dutch in 1906, now focusing on the production of oil and its derivatives. As a response to the 1970s oil crisis, Shell diversified *inter alia* into metals, chemicals and nuclear power. The mixed success of its diversification strategy triggered an intense soul-searching process at board level. Lo van Wachem, then Chairman of Shell, commissioned an internal study written by two of its corporate planners and two business school professors to examine companies of similar size and global scale, which during their long history had successfully weathered periods of fundamental change in their business environment. The authors of the 'Shell Study'[9] could only identify 40 out of ca. 40,000 corporations in the industrialized world that would meet the criteria, 27 of which were examined in detail. What they established were four key factors these long-lived large corporations had in common[10]:

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[7] Diversification (Investor Peter Lynch speaks of 'diversification'), contrary to the 1960s to 1980s, is nowadays considered a handicap : stock markets apply a substantial 'conglomerate discount' to diversified companies (cf. e.g. The Economist, August 15, 2015, pg. 60)

[8] The brand name 'Shell' was derived from the use of seashells as means of payment

[9] The Study is kept in the non-public archives of the company. Arie de Geus, one of the two planners, published a book on the study : Arie de Geus, 1997, The Living Company, Harvard Business School Press, Boston

[10] Arie de Geus, pg. 6,7

1. They were sensitive to the environment, constantly tuned to changes in their environment, and reacted in a timely fashion;
2. They were 'cohesive', offering their employees a sense of belonging, identification and meaning;
3. They were, within the boundaries of the cohesive organization, tolerant and supportive of activities at the margin such as eccentricities and experiments;
4. They were financially conservative: they had a culture of frugality, refrained from bold risk-taking, and built financial reserves in good times.

In Praise of the Family Business

Walking down an imaginary 'gallery of ancestral companies' still alive today companies such as French paper manufacturer Richard de Bas (*1326), Italian bell foundry Marinelli (*1040) or the Finnish household hardware maker Fiskars (*1649), what strikes the observer first is that all are closely held private family businesses[11]. Evidence suggests that inadequate corporate governance, and more specifically, the failure to address the 'agency problem'[12], lies at the origin of the premature demise of public corporations. Not so for family-owned businesses but for what reason? Family members with a dual role of executives and board members prevent the agency problem to occur in the first place as owner-managers, a conflict of interest cannot arise because the family manager's substantial ownership interests will prevail over their interest in maximizing management compensation. In other words, family members have 'skin in the game', which

[11] In the context of this article, a 'family-owned business' or 'family business' is understood to be a private company majority-owned by a single family.

[12] The problem of devising corporate governance in ways as to minimize the divergence between the (long-term survival - and growth-oriented) interests of shareholders and the (short-term, profit-oriented) interests of hired executives.

implies that they suffer the consequences of any major management errors, possibly extending to a total loss of their heritage. Nassim Taleb, an outspoken proponent of the application of the 'skin in the game' heuristic to corporate governance, pins the ephemerality of corporations or the very absence of this principle in governance "(managers') allegiance is to their own personal cash flow. They will not be harmed by subsequent failures, they will keep their bonuses, as there is currently no such thing as negative manager compensation. Corporations are so fragile, long-term, that they eventually collapse under the weight of the agency problem, while managers milk them for bonuses"[13].

There are many examples of the applied 'skin in the game' heuristic[14] playing out in favor of corporate longevity. The excesses leading up to the 2008 financial crisis, culminating in the demise of Bear Stearns and Lehman Brothers, and the bail-out by taxpayers of global bank corporations such as UBS or regional financial institutions countrywide, did not occur at any of the private banks, inasmuch as their owners were 'GP's' general partners subject to unlimited liability for their actions. As a consequence, private banks did not take any of the financial risks of their counterparts in bank corporations, who knew that in the worst case they could lose their jobs, but not their shirts. By the same token, family businesses tend to be risk-averse, even if this means losing out to competitors on promising new business opportunities[15]. The key contributing factor fundamental to the risk-awareness of family businesses is rooted in social control:

[13] Nassim Taleb, 2012, Antifragile, Random House, pg.404-405

[14] Cf. e.g. Nassim Taleb

[15] Excessive risk management may, however, have the problematic effect of stifling innovation: "Corporate governance is in many ways poison to the creative and innovation processes within a company and it is easy to get to the point where the board is more preoccupied with risk management (…) than building the top line. (Peter Lorange, Jimmi Rembiszewski, 2014, From Great to Gone – why FMCG companies are losing the race for customers, Gower Publishing, Farnham, UK, pg.5

risky bets gone wrong inevitably affect cohesion within the family[16]. The failed executive of a corporation can always find another company to manage, however, a failed family business manager cannot apply for a new family.

Successful family businesses tend not to be naïve about the realities of potential family conflicts, but devise effective, family-specific governance mechanisms. "The most ambitious family businesses have long recognized that if they want the business to last and not be damaged by the inevitable stresses that families are subject to, they must take their governance seriously (by drafting) their own private codes and constitutions."[17]

Obviously, family businesses are not immune to failure, either evidence merely suggests that family businesses are more enduring than non-family businesses[18]. Two thirds of family businesses fail between the first and second generation and only 12 percent reach a third generation. Only three to four percent of third generation survivors make it to fourth generation[19], by which time the statistical chances for survival for future generations begins to increase. "The fourth generation (of a family business) is sufficiently well-off, as a rule, for the ablest of them to want to pursue their own interest and their own careers rather than dedicate themselves to business."[20]

[16] Nordqvist, Mattias (ed.) and Zellweger, Thomas (ed.), 2010, Transgenerational Entrepreneurship: Exploring Growth and Performance in Family Firms Across Generations, Edward Elgar Publishing, Cheltenham, pg. 168

[17] Rupert Merson, 2010, Rules are not enough – the art of governance in the real world, Profile Books, London, pg. 8

18 O'Hara, William T, 2004, Centuries of success – lessons from the world's most enduring family businesses, Adams Media, Avon, Mass.,pg. XX

[19] O'Hara, pg. xviii

[20] Peter F. Drucker, 1995, Managing in a Time of Great Change, Butterworth-Heinemann, London, pg. 50

When family businesses eventually fail, the most common causes are related to succession.[21]

1428 Years of Survival: The Case of Kongō Gumi

The longest-lived business in history, Japanese construction company Kongō Gumi, mastered 40 successions until disaster finally struck. Its history dates back to the year 587 A.D., when Prince Shōtoku, the founder of Buddhism in Japan[22], commissioned the building of the first Buddhist temple in Japan. Shōtoku selected a Korean master builder, named Kongō Shigemitsu. It took fifteen years and three of Kongō's sons to complete the temple. During that time, Shōtoku ruled Japan and granted imperial support for the building of other temples, among which is the Hōryō-ji temple, whose seventh-century five-story pagoda stands today as the world's oldest wooden structure.

Once every 100 years on average, such structures, nearly 80,000 of which exist in Japan today, required maintenance, reconstruction or repair not counting the destructive effects of fires, storms, earthquakes and armed conflict, providing further business opportunities for temple builders. The Kongō family was well positioned to gain such repeat business, having established the oldest brand of temple builders in Japan.

Kongō Gumi[23] thrived throughout the centuries, taking political unrest, hard and good times in stride, until the modernization and secularization of the country during the Meiji Restoration (1868-1912) brought previously unseen challenges, forcing Kongō Gumi to compete in open markets for the first time. During World War II, with

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[21] Nordqvist, Mattias (ed.) and Zellweger, Thomas (ed.), 2010, Transgenerational Entrepreneurship: Exploring Growth and Performance in Family Firms Across Generations, Edward Elgar Publishing, Cheltenham, UK, pg. 169

[22] Buddhism, having originated during the sixth century B.C. in India became popular in China and Korea and introduced to Japan around 540 A.D.

[23] Gumi means 'Group'

no funds available to reconstruct temples and shrines, Kongō Gumi switched to making coffins to ensure their survival. As business picked up again after the war, the company reverted to its traditional business.

During the 1980s, finally, began a period of decline, which culminated in Kongō Gumi's bankruptcy after 1428 years of continued existence as an independent family business.

As is often the case, it was not a single event which led to a catastrophic outcome, but a combination of adverse influences. Three fundamental changes threatened Kongō Gumi's existence:

1) The pace of secularization, having begun with the Meiji Restoration, had accelerated as the population became increasingly westernized.

2) Japan's real estate boom which began in 1986 had sent land prices skywards, making new temple construction increasingly unaffordable and

3) Innovations by Kongō Gumi and other temple construction companies had introduced state-of-the-art building technologies, namely concrete support structures and unobtrusive fire-safety features [24], making temples and shrines more resistant to natural disasters, and lengthening maintenance cycles. These three changes translated into a permanent fall in revenues and profits, presenting only two existential strategic alternatives for Kong Gumi's management:

a) Shrink the company to match a permanently shrunk market
b) Develop new income streams to compensate for the structural revenue shortfall

Alternative a) would have necessitated laying-off skilled staff, which for a number of reasons was not considered a viable option: apart from

[24] O'Hara, pg. 12

cultural considerations[25], laying-off trained artisans would have borne the risk of eroding the company's very competitive advantage, as its most skilled workers might have looked elsewhere for job security. Masakazu Kongō, the 40th head of the business, expressed the dilemma as follows "Japan's economic conditions are not favourable, but we have to make sure our employees make money to live. We can't make the company smaller."[26]

At that time, Masakazu Kongō committed a strategic blunder, putting an end to 1428 years of corporate survival, he decided to establish a new branch, which would focus on the development of office buildings and apartment complexes. However, in the general construction industry the company's competitive advantage and core competencies were irrelevant. Industrial-style construction calls for low-cost building knowhow, including the use of pre-fabricated concrete and steel elements, with which Kongō Gumi had no experience, let alone any advantage over their much larger competitors. To the contrary, economies of scale provided substantial cost advantages to big construction firms, which explains the dominance of large construction companies over smaller ones, and the concentration process typical for this industry. Worse still, rather than position the company as a mere contractor, Kongō Gumi became a developer, assuming the commensurate high financial risks. Over the course of several years, the 104-employee company took on debt to the equivalent of USD 343 millions to finance land acquisition and construction. When the real estate bubble burst in the 1992-93 recession, the collateral securing Kongō Gumi's bank loans lost value, breaching bank loan covenants and triggering insolvency. Major Japanese construction company Takamatsu acquired the company in

[25] Including regarding the company's culture: Masakazu Kongō's grandfather committed suicide at the age of 35 during the recession of the 1930, having been forced to cut jobs

[26] O'Hara pg. 12

2006 and absorbed it into one of its subsidiaries. This marked the end of the world's longest-lived company.

What, in essence, was Masakazu Kongō's fatal strategic blunder? The last of the Kongō's considered Kongō Gumi primarily a construction company, which in reality it had never been. What it had been, for over 1400 years, was a niche temple construction company using highly sophisticated, proprietary wood sculpting and building techniques, handed down from one generation to the next.In its small-pond niche market Kongō Gumi was big fish. However, the big lake that Kongō Gumi was aspiring to thrive in was infested with much bigger fish preying on small fry.

Facing secular challenges, what could the last of the Kongō's have done to save the company? Instead of opting for unrelated diversification, the company could have developed new markets in which their skills and knowledge were relevant, such as the construction of sophisticated secular wooden buildings, public museums or high-end, traditional residential buildings. Kongō Gumi could also have envisaged the production of elaborate pieces of furniture, although given the scarcity of furniture in traditional Japanese homes, this would have required developing export markets. Instead, by entering the mass-market construction business, Masakazu Kongō violated one of the very principles of the Kongō dynasty: 'Don't diversify' (i.e., into unrelated activities).

Despite its rather inglorious end, Kongō Gumi's exceptional longevity over fourteen centuries was all the same remarkable. Are there any lessons that might be applicable to businesses in general, and in particular family businesses?

In order to answer this question, we need to understand the reasons for the company's rise to a leading constructor of Buddhist temples. The company's specific competitive advantages were rooted in its core competencies of high value wood skilled artisans. Its competitive moat was made with the help of the sophistication of the required skill levels:it took a Kongō master builder over ten years to train an apprentice quite a formidable barrier to entry for any would-be imitator. To maintain its leading edge, Kongō Gumi needed to uphold the highest level of quality in its skilled workforce: “Customers know what to expect. If our level of quality goes down, we become a common company we don’t distinguish ourselves.”[27] Unfortunately, the last of the Kongōs did not heed his own advice when Kongō Gumi diversified into the general construction business.

Having established the causes of Kongō Gumi’s demise, what were the main reasons for their impressive history of survival? As alluded to before, succession, or the governance principles applied to succession in family businesses, is one of the key empirical reasons for family business failure. If succession is based on the principle of primogeniture[28], the oldest, but possibly mediocre or (worse) lazy son is handed the opportunity to put an end to a business dynasty. So how did successful succession look at Kongō Gumi? Successful succession meant that Grandma got the ‘top job’ if she happened to be the most competent among the members of the Kongō clan[29]. Competence, not male primogeniture, motivated family decisions about succession. Succession and success were closely interrelated in the company history.

Another success factor was the company’s unique level of skilled artisans and quality. Sadly, the company’s demise had to do with failing to recognize its core purpose, its core competency and the competitive advantage derived from it. In this sense, the demise of Kongō Gumi exemplifies the vital importance of understanding what a specific business is all about.In the words of Jim Collins, “it is better to understand *who you are* than where you are going for where you

[27] O’Hara, pg.10

[28] The eldest son is first in line to take over from the father

[29] For a cultural analysis of succession in Japanese family businesses, cf. Hamabata, Matthews Masayuki, Crested Kimono, 1991 : Power and Love in the Japanese Business Family, Cornell University Press, Ithaca

are going will almost certainly change"[30]. In other words, a company's core purpose is "more important (than core values) for guiding and inspiring an organization"[31].

Corporate longevity is invariably related to skilled artisans and the production of high added-value products, in niche markets: speedboats, church bells, sophisticated glass objects, gourmet food based on proprietary recipes. A long-lived FMCG company is almost a contradiction in itself, as the lack of differentiation of commoditized products, combined with pointless innovation of the type of four-blade razors[32], battery-powered peppermills or electronic exercise belts are recipes for corporate irrelevance. Skilled workers as a key differentiator, on the other hand, conveys a sense of pride and meaning for a company's employees reaching beyond earning a living.

Creating Meaning from Innovation

Executives like to proclaim that their employees constitute their 'most valuable asset' success and long-term survival depend on the skills and sustained motivation of staff. When companies fall on hard times, those who have a purpose beyond profitability and are able to keep morale high are more likely to survive than those whose employees struggle to find meaning in times of cost-cutting, lay-offs and pay cuts. Keeping the corporate non-financial purpose alive in times of change is critical. Developing corporate *logotherapy* may be more material to long-term survival than debt-financed stock buy-backs in an attempt to boost earnings artificially.

This stated, it is not difficult for management to instil a sense of purpose in the employees of a pharmaceutical company working on the development of vaccines to fight rare diseases, a fuel cell manufacturer, or even a provider of sophisticated enterprise software

[30] Jim Collins, Jeremy Porras, 2004, Built to Last, Harper Collins, pg. XXV
[31] Collins, Porras, pg. 224
[32] e.g. four-blade razor 'Fusion ProGlide with FlexBall Technology', recently followed by a five-blade version

solutions. But what about the employees of, say, a toilet paper manufacturer can they ever find any sense of pride, purpose and belonging in their work?

Peter Lorange relates the story of Paulo Pereira da Silva, one of his former students. In 1984, EPFL-graduate Da Silva took over the family business Renova, a Portuguese manufacturer of rather bland commodity products: toilet paper and disposable tissues. Appointed CEO in 1995, he set out to challenge competitors in a global market dominated by multinationals such as Procter & Gamble or Kimberly-Clark. Renova at that point had "no clear cost advantage, no distinctive brand positioning and no unique product features."[33] Following a restructuring of the company, Da Silva repositioned the business from a maker of disposable paper products to a *provider and guardian of personal health and well-being*. Obviously, the products and the brand had to reflect this new ambition: Renova introduced toilet paper and tissues impregnated with moisturizing lotions to the Spanish, Portuguese and French markets. In the wake of this commercial success, Da Silva launched the first black toilet paper, followed by fuchsia, orange and royal blue, all stylishly packaged. Da Silva's 'purple cow' strategy[34] transformed Renova from a producer of commodity products into a successful "highly value-add niche player that has successfully sidestepped the dominant multinationals in a low-margin, commodity-driven market.[35]" Few would argue that the company had not increased the odds of its survival over the long-term, and instilled a new sense of purpose in its employees.

Corporate Anti-Ageing: Five Recommendations to Ensure Longevity

Many factors contribute to long-term corporate survival, and some are specific to either family businesses or public corporations. The

[33] Lorange, pg. 39

[34] cf. Seth Godin, 2009, Purple Cow : Transform your business by being remarkable, Penguin Books, New York

[35] Lorange, pg. 41

following five basic principles, if applied consistently, are likely to increase the life span of businesses irrespective of their legal forms:

1. Provide purpose and meaning. The quality and duration of human lives depend largely on the presence of meaning, and much less on external factors such as material wealth[36]. In a similar fashion, the correlation between corporate longevity of businesses and the purpose and meaning they provide to their employees is much stronger than the impact a certain rate of profitability has on the life of a company. Companies must know 'who they are' and what their purpose is, and how they can elevate their corporate purpose to the highest possible levels, e.g. through innovation. Company executives who know '*who we are'* and '*what our purpose is'* have a higher probability of making the right strategic choices about '*where we should go*' in order to remain relevant and survive over the long term. Kongō Gumi's last CEO had the wrong answer to the first two notions and the company consequently took the exit to extinction. Renova on the other hand redefined its purpose, gave itself a new meaning, and signed a new lease of life for the company.
2. Design governance in a way to minimize the agency problem. Appoint a CEO who has a strong self-interest in the longevity of the company, and who will, along with other shareholders, bear the financial consequences of mistakes and not merely participate in the upside; design executive compensation in which CEO's contribute 'skin' to the game, not simply receive stock options. Family businesses, including private banks, managed to minimize, if not eliminate, the agency problem. The biggest of their listed counterparts, aiming at earnings growth at all costs, are continuously mired in scandals, none of which will cause any financial harm to their executives whose personal worst-case scenario consists of being handed a golden parachute.
3. Balance innovation, informed risk-taking, and financial prudence. Minimizing the agency problem through maximizing 'skin

[36] cf. the lifework of Victor E. Frankl and the ''Third Viennese School of Psychotherapy'

in the game' will already go a long way in ensuring a business is managed with a view of the survival of the business over the long term, instead of short-term, bonus-triggering financial performance. Although evidence suggests that family businesses are generally better able to minimize agency problems, they may limit their development potential by refraining too much from taking risks. Numerous examples of reckless risk-taking by managers in search of growth and personal financial gratification (most recently exemplified by the Volkswagen emission test fraud) and their inevitable effect on corporate survival show that erring on the side of too little risk-taking is the healthier long-term strategic choice. Financial prudence, such as exemplified in the Shell study, is the 'Keynesian' equivalent of building reserves in good times in order to survive, and gain market shares at the expense of less prudent competitors in tougher times. The current wave of leveraged stock buy-backs by US corporations in order to grow earnings on a per-share basis, hence triggering executive bonuses, flies in the face of financial prudence and will come at the expense of longevity as more and more corporations unable to pay back loans in an environment of normalizing interest rates, will go bankrupt.

4. Succession based on competence does not give any consideration to gender in succession planning. Do not think in categories of male or female leaders, only think in terms of leaders. Consciously or unconsciously giving preference to less qualified, male candidates to succession jeopardizes corporate survival.[37] Succession planning should be one of utmost concern to every company, corporations and private businesses alike. Boards of corporations, being able to select leaders from both inside and outside candidates, for once have an edge over family businesses who often limit themselves to choosing the best from a small group of family members. Kongō Gumi managed to create success from succession by making

[37] cf Sheryl Sandberg, 2013, Leaning In : Women, Work and the Will to Lead, Random House, New York

CEO positions available for qualified in-laws irrespective of their gender.

5. Establish frugality as a core company value[38]. Kongō Gumi's leaders refrained from displaying any external signs of power and status. The size and furniture of their offices were hardly distinguishable from those in the accounting department. Andy Grove, co-founder and former CEO of Intel, imposed frugality as a core company value by setting the example every day: his executive suite consisted of a standard 3x3 m cubicle (albeit a corner cubicle overlooking Santa Clara), and insisted on travelling in economy class and taking local trains from the airport, much to the horror of Intel's security staff. Needless to say, under Grove's reign the biggest and most profitable semiconductor company did not own a single corporate aircraft, while Hewlett Packard, already in decline under Carly Fiorina, owned 12 large corporate jets. The principle of frugality applies to any kind of resources, including but not limited to corporate financial resources. Frugality is a state of mind, encompassing self-constraint, discipline and strictly objectives-based spending in good times and bad, but also a dose of healthy paranoia, and a constant mindfulness of the ephemerality of corporate existence.

[38] for the link between caloric restriction in humans and lifespan cf. www.ncbi.nlm.nih.gov/pmc/articles/PMC1480571/ retrieved September 14, 2105

Sustainable Development: The Uncertain Role of Tropical Forests in the Paris Agreement

*Claude Martin**

Abstract
The Paris Agreement of the United Nations Framework Convention on Climate Change (UNFCCC) includes the concept of Reducing Emissions from Deforestation and Forest Degradation (in developing countries)" REDD. These emissions currently amount to 10-12 percent of the anthropogenic greenhouse gas emissions. This being a net value from which the sequestration of CO_2 by tropical forest was deducted, the theoretical reduction from avoided deforestation could be considerably higher. However, it would be naive to believe that REDD could put a near complete stop to the complex phenomenon of tropical deforestation. A rapid exit from fossil energy sources will be mandatory, not least because tropical forests themselves are increasingly victims of climate change.

1. The reduction of tropical deforestation in the Paris Agreement (COP21)

The Agreement includes the explicit requirement for all industrialized as well as developing countries to protect and enhance their forest areas. It refers, more specifically, to earlier decisions to reduce the emissions from deforestation and forest degradation in developing countries that were taken by the parties to the UN Framework Convention on Climate Change (UNFCCC), and which should be supported by a results-based payment system. What is meant by this part of the Paris

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Agreement is the so-called REDD concept (Reducing Emissions from Deforestation and Forest Degradation in Developing Countries). It is referred to as REDD+ in its extended form, and in addition to the reduction of deforestation, includes forest conservation (protected areas), sustainable forest management as well as afforestation. Through the cross-reference in Article 5.2, these measures become *de facto* part of the Paris Agreement. It also underlines the necessity to protect vulnerable ecosystems and to ensure food security. The Agreement on the other hand, fails to make any specific statement with regard to the role of agriculture in reducing the emissions of greenhouse gases.

One of the reasons why the Agreement leaves out the role of agriculture in the emission reduction objectives (Article 5 refers only to forests) rests in the concerns of many developing countries that emission reductions in agriculture could impair their food production and security. But the powerful agro-industry lobby in certain countries is also likely to have resisted the inclusion of agriculture. One also has to admit that greenhouse gas accounting of agricultural activities, which are without any doubt a major source of emissions, is still fraught with many uncertainties. Thus, agriculture is mentioned only as being vulnerable to climate change in the non-binding preamble to the Agreement.

2. REDD+ an intriguing but idealistic concept

By the end of April 2017 the number of signatories to the Agreement that had submitted, nationally determined contributions (NDCs) "to emission reductions, which are part of the ratification process, had reached 138 countries. It comes as no surprise that the majority of the tropical forest countries listed emission reductions under REDD+. Even though these national emission reduction targets are not mentioned in the Paris Agreement, it is evident that forests are expected to play an important role in achieving the national emission reduction goals. However, these expectations are replete with a good portion of technical uncertainties – and wishful thinking. The functioning of forests as carbon sinks is far more complex than most people, let alone negotiators, think. Those who believe we could cancel out our climate sins by tree-planting campaigns, are likely to reckon without the host.

When the REDD concept was first discussed at the beginning of this century, the Intergovernmental Panel on Climate Change (IPCC) assumed that tropical deforestation and forest degradation would amount to about 25 percent of the global anthropogenic greenhouse gas emissions (Salomon et al. 2007). Subsequently, this proportion was estimated to be lower (Baccini et al. 2012), but primarily because the proportion of the emissions from fossil fuels had increased, and partly due to the substantial reduction of deforestation in the Brazilian Amazon after 2004.

The considerably lower estimated proportion of greenhouse gas emissions from tropical deforestation made some exponents raise the question whether the enormous international effort and costs of REDD+ could be justified, or whether other emission reduction targets should be focussed.

Richard A. Houghton from Woods Hole Research Centre, one of the leading specialists in greenhouse gas accounting, pointed out that the now often quoted figure of 10 -12 percent (which amounts to about 1.1 GtC p.a.) is the net emissions value, after the deduction of the contribution of tropical forests as carbon sinks. Tropical forests have an important potential for carbon sequestration from natural and planned reforestation and forest expansion. Even intact primary forests, under normal circumstances, act as carbon sinks to a significant extent (see Table 1).

	Houghton (2013) 2000-2005		Grace et al. (2014) 2005-2010	
	Gt C/year	% of all emissions	Gt C/year	% of all emissions
Emissions from trop. deforestation	0.81	7.44	0.9	8.49
Emissions from trop. forest degradation	1.47	13.51	1.1	10.38
Total deforestation and degradation	2.28	20.96	2.0	18.87
C - sequestration of tropical forests	- 1.17		-1.85	
Net emissions	1.11	10.2	0.16	1.5

Table 1 Carbon emissions from tropical deforestation and degradation

The actual gross emissions from tropical and subtropical deforestation and forest degradation, according to Houghton, amount to more than double of the net value, and therefore make up more than 20% of the anthropogenic carbon emissions (Houghton 2012). It is a common mistake that gross and net emissions from deforestation are confused, at times even in scientific literature. This may lead to wrong conclusions on such questions as those raised about the cost-effectiveness of REDD+ mentioned above. The fact that the emissions from tropical deforestation and forest degradation amount to at least one fifth of all emissions also means that the reduction-potential would be very substantive underlining the logic for REDD when it was adopted in the first place, at the UNFCCC Conference of the Parties in Bali in 2007. Countries that pledge to reduce their previously determined historical deforestation rates below a certain level would be eligible for compensation. Payments were to be financed with the sale of emission reduction certificates to governments and the private sector. At that time, REDD generated a lot of enthusiasm even with non-governmental organizations. It was considered a cost-effective method to reduce greenhouse gas emissions, with additional, positive effects for conservation and sustainable forest management. This view however soon proved to be naive, and the frenzy soon faded.

Carbon Balance of Tropical Forests Since 2000

According to Houghton (2013) and Grace et al. (2014) in chapter 11 of the «Contribution of Working Group III to the Fifth Assessment Report of the IPCC» (Smith and Bustamante et al. (2014), the emissions from deforestation and forest degradation include the harvesting of biomass, as well as the emissions from ground fires of peat forests. The significant difference of carbon sequestration between the two studies explains itself by new assessments of the contribution of intact tropical forests as carbon sinks by Grace et al. and others.

<u>3. REDD+ a delivery by forceps</u>

Some of the first REDD+ pilot projects promptly showed that a substantial reduction of emissions from deforestation in all tropical forest areas through REDD+ would be wildly optimistic: tropical deforestation and forest degradation are far too complex phenomena, with multiple and regionally different causes, for a universal compensation scheme for avoided deforestation to be effective. There is no silver bullet to prevent local people, corporations and governments around the globe from clearing forests. Even ten years after the Conference of the

Parties (COP 13) in Bali in 2007, a multiplicity of technical problems created several headaches for policy specialists and negotiators.

First, there is the problem of reference values: should past deforestation rates be taken as a base line for future rates? Data sets prove to be unreliable in many countries, and the classification of forest degradation is even more treacherous. Second, there remains the question of additionality with too high reference values, countries with high deforestation rates could gain higher compensation than those that took good care of their forests in the past. Third, how could the durability of forest protection measures be assured and displacement of deforestation to other areas be avoided? Indigenous people feared their uncertain land rights could be traded as emission reduction certificates.

Finally, there remained the question about competent and non-corrupt authorities to supervise a REDD system.

Thus, in the course of the past years, the negotiations on REDD+ made much slower progress than expected when the Bali Action Plan was adopted. Some pilot projects in a variety of countries attracted payments from voluntary markets, but the grand idea of an international emissions trading market seemed to have vanished. Even the Paris Agreement made rather vague allusions to it and reckoned that it would be established by 2020 at the earliest. Instead, the concept of results-based payments for avoided deforestation between nations provided a new approach in the forest and climate debate. But results–based payments require a change of economic and regulatory policies, which proved challenging in their implementation. The independence of the state from powerful corporations that drive deforestation and forest degradation in the largest tropical forest countries was not guaranteed and remained difficult to handle.

4. Economic interests drive deforestation and forest degradation

Some industrialized countries, in particular Norway, emerged as financially strong promoters of REDD+ already in the preparatory phase for a binding future agreement under UNFCCC. Norway committed a contribution of USD one billion each to two countries, Indonesia unlike Brazil, under a performance arrangement. Indonesia, unfortunately, could not produce any reliable information on its rate of deforestation despite the fact that the necessary remote sensing technology had been available for years. The conversion of peatland forests for oil palm as well as pulp and paper plantations in Kalimantan exacerbated the problem of the assessment of Indonesian carbon emissions further. Despite Indonesia's commitment to reduce its carbon emissions from deforestation substantially, and its consent for a process of "REDD+ Readiness" and contributions for verified emission reductions in 2010, the hopes of the donor countries remained unfulfilled.

In the following years, REDD+ remained an uncertain deal. The commitment of USD 100 billion per year funding from public and private sources to the Green Climate Fund of the UNFCCC by 2020, could substantially enhance the funding of REDD+ projects. But even after the ratification of the Paris Agreement in October 2016, and the following Conference of the Parties in Marrakesh (COP 22), the contributions to the Green Climate Fund remained modest, which led some forest specialists to declare: "REDD is dead". This is a harsh judgement, as many tropical countries have created their national and subnational REDD+ programs and submitted them to the Forest Carbon Partnership Facility (FCPF) for funding. The FCPF is a global partnership of governments, business, and civil society organizations managed by the World Bank that supports forest countries in the preparation of their REDD+ strategies. 47 countries participate currently in the REDD+ Readiness

Programs of the FCPF. Results-based payments from the Green Climate Fund should also soon start disbursements for REDD+ projects.

REDD may not be dead, but measured against the initial “pie in the sky“ expectation of an effective carbon market that could compensate countries, sub-regions, and land-owners for avoided deforestation, the disappointment is understandable. Indeed, for the private sector to contribute in a major way, a robust market with carbon emission certificates from REDD will be necessary. From the past ten years of REDD+ history we must conclude that reducing tropical deforestation is a vastly more complex process than the initiators of REDD imagined at COP 13 in Bali. Until a few decades ago, tropical deforestation and degradation were mainly driven by subsistence agriculture of smallholders (Fig. 1). Today they are a consequence of the powerful economic forces behind commercial agriculture, the pulp-and paper and rubber industry, and increasingly, mining. The financial means available for REDD+ will not easily balance out these forces, especially in countries with weak and/or corrupt governments.

Fig. 1 Tree felling by a traditional West African shifting cultivator

Shifting Cultivation in African Rainforests

Up until the 1990s, shifting cultivation and other forms of subsistence agriculture were considered the main drivers of deforestation in the tropics. Today, commercial agriculture primarily for the cultivation of oil palms and soybeans, as well as the conversion of forests for cattle pastures, contribute the bulk to deforestation worldwide. Only in Africa does subsistence agriculture carry a still greater weight. (Photo: C. Martin).

5. The potential of tropical forests as carbon sinks

Article 4.1 of the Paris Agreement deals with the long-term objective of limiting global warming: the parties to the agreement are called upon to pass the zenith of their greenhouse gas emissions as soon as possible and thereafter to reduce their emissions rapidly. This should lead to “a balance between anthropogenic emissions by sources and removals by sinks in the second half of this century”. Excluding technological methods, such as Carbon Capture and Storage (CCS) that is not mentioned in the Paris Agreement, this can only mean that the international community counts on natural sinks for the removal of CO_2 from the atmosphere. And as agriculture, currently a major source of greenhouse gas emissions as well as deforestation, has also been left out of the Paris Agreement, this leaves the forests as the only significant natural carbon sinks on land. The forests should save us from a fatal climate catastrophe. We have already discussed the relatively limited possibilities of reducing emissions from deforestation through REDD+ in the previous section. Thanks to remote sensing technology allowing assessments of forest area as well as biomass, the emissions from deforestation can be estimated with a certain accuracy. To estimate the emissions from forest degradation, on the other hand, is more problematic and currently still fraught with difficulties.

The accounting of carbon fluxes in forests, generally speaking, is a complex affair with considerable scientific uncertainties. These difficulties not only concern the emissions from deforestation and forest degradation, but likewise the potential of carbon sequestration of forests, and tropical forests in particular. Carbon uptake falls in four categories: sequestration of intact forests, the regeneration of secondary forests (after logging), the natural regrowth of former farming land, and afforestation. Thus far, the carbon sinks of tropical forests are almost exclusively considered to depend on natural regeneration and regrowth. The contribution of afforestation and other tree plantations carry little weight. To what extent intact (primary) forests constitute a net carbon sink, on the other hand, is up for much debate. The effect of the absorption of CO_2 by plants (photosynthesis) is reduced by the plant respiration and the CO_2-emissions from the decomposition of plant material and the soil. The balance between CO_2-absorption and respiration/decomposition decides whether a forest is CO_2-neutral, a carbon sink or an emission source. As this balance also depends upon external factors such as soil phosphorus and primarily water, this balance is extremely unstable. Until a few years ago one considered the carbon balance of intact forests in a state of climax as neutral, i.e. that the absorption and the emissions of CO_2 would be close to equal.

6. The important role of intact tropical rainforests

Recent scientific assessments proved that intact (primary) tropical forests are indeed net carbon sinks (Grace et al. 2014, Pan et al. 2011). Under normal climatic conditions, their capacity to sequester carbon was estimated to come to at least 0.47 GtC per year. In 2015, a comparable value has also been recorded by the Jet Propulsion Laboratory of NASA. These estimates were based on a large number of measurements undertaken with the newest remote sensing technology. This sink overlooked until a few years ago, explains the important difference between the values of Houghton and Grace et al. in Table 1. A number of authors suspect that the positive carbon balance of intact forests could be the consequence of increased CO_2-fertilization caused by the higher CO_2 concentration in the atmosphere. In case this assumption proves to be correct, it would be an example of a negative feedback loop that would offset the rising CO_2 emissions from anthropogenic sources through an increased sequestration in natural sinks, at least to a certain extent.

The important contribution of tropical forests as carbon sinks (1.17 – 1.85 GtC per year, including from primary forests, natural and planned reforestation and forest expansion trees Table 1) also means that if tropical deforestation and forest degradation could be avoided, these forests could almost compensate the CO_2 emissions of the global transport sector. Such an assumption, however is purely hypothetical – not only because of the difficulty of curbing deforestation substantially at the global level, as described above, but also because of an additional threat, the effect of climate change on the capacity of forests to sequester carbon.

7. Tropical forests are not just savers, but victims as well

The global warming trend, which has already reached 1°C above the pre-industrial level, does not only manifest itself in the polar regions and in the frequency and severity of hurricanes. Tropical rainforests are also increasingly affected by climate change: it becomes apparent in the form of extended drought periods that cause drought stress in many tropical rainforests. Higher temperatures in themselves do not seem to be the actual problem for these forests, nor even the total amount of annual precipitation. Above a certain minimum, it is the relatively average seasonality of rainfall that determines a rainforest. If a tropical rainforest suffers from drought periods of two months or more, year after year, the forest structure, dynamic and productivity will change over time (Martin 2015).

Since the 1990s, the African as well as the South-American rainforests, in particular, suffer periodical drought stress. With the El Niño phenomenon in the equatorial pacific region occurring in ever-shorter time intervals, drought periods were further accentuated. Even in distant Borneo, they regularly exacerbates the infamous and uncontrollable fires in peat forests. Scientists of the University of Leeds proved a dangerous feedback loop in Amazonian rainforests: the shortage of water and soil nutrients causes the photosynthesis of forest plants to shut down during drought periods, and with it the absorption of CO_2. At the same time, plant respiration and the decay of dead plants continues to produce CO_2. Under the influence of El Niño, Amazonian forests can turn from a carbon sink into a net carbon source (Lewis 2006)! The droughts of the El Niño-years 2005 and 2010 thus led to a massive loss of carbon sequestration in large parts of Amazonia. During these years, the forest developed into a net emission source (Fig. 2), which cancelled out the usual sequestration of 0.4 GtC of several years (Lewis et al. 2011). In 2014 NASA, using the most recent satellite technology, also found increasing signs of drought in the Congo Basin for the period 2000-2012 (Zhou et al. 2014). Hence we now foresee a future where increasing greenhouse gas emissions lead to somewhat enhanced CO_2 -fertilization of tropical forests in years of regular seasonality of precipitation, on the one hand. But on the other hand a contrary a weakening of rainforests as carbon sinks, caused by more frequent and more intense drought periods, becomes evident. It may turn tropical forests into a net emission source, as we have seen in the case of the Amazon Basin during the El Niño years.

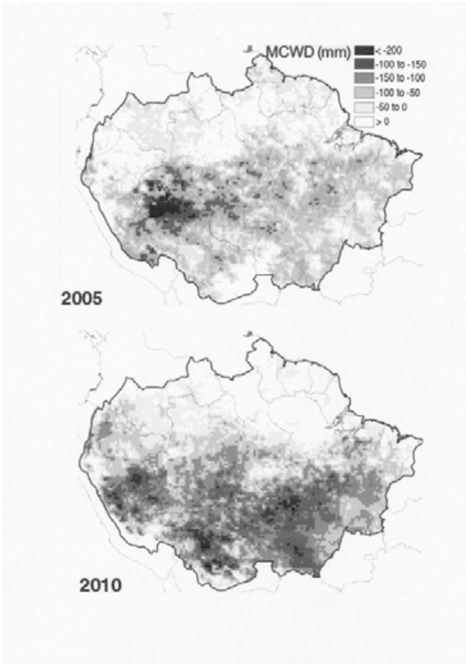

Fig. 2 Satellite-derived standardized anomalies for dry-season rainfall for the drought of 2005 and 2019s

Water Deficit in the Amazon during the Drought Years 2005 and 2010

The maximum climatological water deficit (MCWD) in Amazonia compared with the 10-year average. It is a measure for the intensity of the drought in these years (adapted from Lewis et al. 2011)

<u>8. Paris Agreement essential for the preservation of biodiversity</u>

The Agreement avoids any allusion to a stepwise "decarbonisation" of the world economy, which deceived many observers. Instead, the Agreement makes vague reference to an equilibrium between anthropogenic emissions and the sequestration of greenhouse gases. This expectation raises the impression that natural sinks could contribute in a major way to the stabilisation of the world's climate - the biosphere shall be responsible to cover our climate sins.

Of course, the reduction of deforestation and forest degradation in the tropics could theoretically contribute in a major way to mitigating global greenhouse emissions. The immense complexity of deforestation processes, however, counteracts this potential. The initial expectations of significant and rapid progress through a REDD+ compensation scheme for avoided deforestation have suffered bitter setbacks. After the Paris Agreement, it would certainly be inappropriate to give up on REDD+. The concept still bears the potential to change the game in certain countries with high deforestation rates. At the same time, it is an urgent necessity to pay far more attention to the capacity of tropical forests to serve as effective carbon sinks: this includes the protection of the remaining primary forests, the avoidance of forest fragmentation and degradation through unsustainable logging practices, and the regeneration of secondary forests.

The fact that even remote areas of tropical rainforest in Amazonia and in Central Africa are exposed to climate change-induced drought stress in increasing frequency, turning these forests into a net emission source during certain periods, must be taken as a sign of a dangerous tipping point. A massive and early reduction of greenhouse gas emissions from anthropogenic sources, and notably from the combustion of fossil energy carriers, is therefore mandatory – not least from the point of view of the conservation of tropical forests. The survival of the largest part of the Earth's biodiversity depends equally upon it.

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PERSUASION: A NEGOTIATOR'S CORE SKILL

*Claude Cellich **

Abstract
This paper is an insight into the art of persuasion. It recognizes the importance of understanding the other party's emotions. The article also looks into the various influential factors when it comes to persuasion like reciprocity, consistency, providing social proof, etc. Finally, the paper provides a comprehensive list of helpful practices as well as those that can deter you in the process of persuasion including a set of questions that can assist in assessing one's persuasion skills.

Persuasion is a core skill for negotiators planning to change or influence the other party's beliefs, behaviors or expectations through effective communications. Persuasion is a form of power and a tool of influence (Reardon 2005). In fact, persuasion is at the heart of negotiation as each side tries to influence each other to their respective point of view. It starts with the negotiator's ability to listen attentively and understand what the other party is saying. In case the communication is not clear, the persuasive negotiator asks questions in a friendly manner to clarify the issue before moving on to other issues. Knowing what the party needs is critical if you want to meet your goals.

Throughout the negotiations, it is essential for negotiators to show patience and remain positive even when the discussions become conflictual or counterproductive.

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Generally, most people are uncomfortable negotiating due to poor understanding of the hidden needs of the parties. Knowing the other party underlying motives is essential to make the first offer as well counteroffers or trading concessions that meet the other party's interests. Since negotiation is an interpersonal interaction, where each side have their own interests, motivation and concerns, a better appreciation of each side underlying interests are necessary to reach mutually satisfying outcomes. To persuade the other party, it is important to tell them what they need to know rather than what you know. Furthermore, people are likely to listen better and longer when you address their need first by personalizing your communications. Additionally, by using paraphrasing, clarifying and summarizing often, negotiators are in a better position to influence the other party to their point of view. In other words, it is better to tell them what they want to hear as they are likely more interested in issues close to their own self-interest.

Persuasion Tactics Can Be Positive or Negative

Negotiators can either apply positive or negative persuasion tactics. Positive tactics consist mainly of rewards, recommendations or praise. During the exchange of proposals and counterproposals, the persuasive negotiator provides strong arguments supported by examples, testimonials or metaphors while weak arguments can have a negative influence on the negotiators. Being persuasive includes presenting proposals with visual aids that are easy for the other party to remember and have a longer impact (Shell and Moussa 2007).

Concerning the handling of objections, persuasive negotiators provide the other party 2 or 3 alternatives with your preferred one last. Negative comments can cause the loss of business opportunities and damage your reputation. Negative tactics refer to threats, warnings, making false promises or misrepresenting information. Applying negative tactics are not conducive to brainstorming, sharing information, establishing rapport or to creating problem solutions. Although monetary rewards are essential, non-tangible benefits such as trust, recognition or personal satisfaction can be highly appreciated by negotiators. When negotiating what really matters is your reputation, credibility, integrity and trustworthiness. Similarly, appealing to the other party's ego is another way to influence the other side.

Role of Emotions in Negotiation

Effective persuasion calls for negotiators to control their emotions when interacting with the other party. Emotions can be either positive or negative. Positive emotions encourage flexibility, creativity and cooperation. It also fosters openness, a willingness to work together and facilitate the exchange of information. Positive emotions are useful to build goodwill, develop relationships and seek superior agreements. Furthermore, positive comments can bring new opportunities such as referrals and repeat business. Negative emotions on the other hand, restrict our capacity to think clearly, limits our ability to listen actively, increases frustration and possibly lead to aggressive actions (Fisher and Shapiro 2005). Negotiators' inability to control their emotions can easily lead to an impasse or a breakdown in the discussions. In other words, positive emotions facilitate win-win solutions while failing to control negative ones can lead to win-lose agreements or a breakdown in the negotiations.

In addition, it is important for negotiators to understand their own as well as the other party's emotions whether they are assertive or empathetic. By expressing empathy, negotiators show interest in the other party's needs. Assertive negotiators state clearly their interests and tend to make decisions rather quickly while less assertive negotiators usually take more time to decide (Lax and Sebenius 2006). To reach mutually satisfying agreements, negotiators should not be too assertive or emphatic but strike a balance between them.

Whether it is in personal or business negotiations, both parties need to understand their emotions and their impact on future dealings as negative emotions often remain long after it has occurred. Moreover, emotions whether positive or negative can be contagious and influence the overall negotiation process. This implies, however, that negotiators detect genuine emotions from manipulative emotional ploys used to deceive them. As emotions influence body language, thinking and behavior, negotiators have to be able to read body language to notice any discrepancies between what is being said and body expressions.

What about Non-Verbal Communication?

How well we read or send non-verbal messages improves our ability to influence the other party. As 93% of our messages are non-verbal (55% visual, 38% vocal and 7% verbal), it is essential that our verbal and non-verbal messages are in harmony (Mehrabian 1971). Although these numbers are dated, recent studies have confirmed the validity of these percentages (Borg 2010). Non-verbal cues consist of facial expressions, eye contact, gestures, and voice. As far as voice is concerned, the rate of speech, tone and pitch convey feelings and emotions. Our capacity to listen is about 650 to 700 words per minute while we tend to speak at a rate of 150 to 160 words per minute which means the average listeners take three fourths of their time to understand agree/disagree and respond to the information provided by the other party (Nierenberg and Calero 1971). Actually most people retain only 40% of what they hear, hence the importance of controlling our non-verbal communications Concerning eye contact, direct and sustainable contact may be viewed as necessary to influence the other person yet the same behavior may cause embarrassment and uneasiness in non-Western cultures. Similarly, laughing in some cultures reflect embarrassment or anger rather than happiness. In other words, negotiators need to be able to avoid making blunders that can derail the negotiations by controlling their non-verbal messages in cross- cultural negotiation

Countering Objections through Persuasion

Negotiators are most likely to face objections when interacting with the other party. Knowing how to overcome objections in a positive and persuasive manner allows negotiators to move the negotiations forward. Moreover, your first offer is likely to have a strong psychologic impact on the other party as well as influencing their overall strategy. Generally, objections fall into six categories: hidden, stalling, no-need, monetary, product and source (Furell 2014).

Hidden objections are difficult to handle when the other parties are not very communicative or do not reveal their true intentions. This behavior may reflect cultural differences where negotiators wait until the end of the discussions to reveal their true intentions.

The stalling objection is a common pressure tactic used by negotiators to delay decisions or by spending time on minor issues at the expenses on more important ones. Stalling tactics are powerful when negotiating in cultures where time is money thereby putting pressure on the negotiators to reach agreement within the deadline.

The no-need objection consists of one party saying that they do not need the product or service possibly to extract additional concessions. In such circumstances, negotiators can try to convince that they do need the product/service or else propose to meet again in the near future to review their needs.

Monetary objections usually emphasize pricing issues. Often, negotiators refer to the price being too high to test the validity of the offer in order to obtain a better deal. Experienced negotiators discuss product specifications, payment plans, transportation modes and other issues before entering into price related discussions. At times, negotiators refer to price being too high as they do not wish to enter into negotiations but will not say so.

Product objections refer to product specifications, design, guarantee or quality. To overcome such objections, negotiators can refer to testimonials from reliable sources or to testing results from independent recognized laboratories. In the event one party refers to a better product or service provided by competition, the other negotiator should refrain from criticizing competition but instead explain how his/her product is different. Another way to convince the other party is to propose a trial order or to refund in case of defective items. In relationship-oriented cultures, negotiators give more importance to personal trust than the product specifications provided the offer is competitive.

Source objections reflect the negotiator preference to deal with another firm due to loyalty or satisfaction with the product. For example, a negotiator may not be willing to do business with the negotiator's firm because the firm is not respecting workers' rights or the firm is in the process of a takeover by a competitor. At times, negotiators prefer to stop the discussion due to personality differences.

As most of these objections tend to repeat themselves, persuasive negotiators are likely to have answers prepared in advance and adapt them during the negotiations to meet the other party concerns. The difficulty facing the persuasive negotiator is to find the real cause of the objections. By exchanging information and probing questions, negotiators can overcome most of these obstacles enabling them to pursue the discussions including exploring multiple options.

In addition to these tactics, negotiators have access to coalition and consultation ones. For example, a negotiator builds a coalition or alliance with other firms to obtain to obtain better terms from suppliers. This type of group power also known as network power. As far as consultation is concerned, negotiators involve the other party in finding solutions jointly (Li and Sadler 2011).

Influence Categories

Influence refers to tactics negotiators use to utilize their power with the intention of seeking a favorable outcome for themselves. Either party to the negotiation can influence the other side to its advantage. Negotiators should attempt to influence the outcome of negotiation by appealing to the self-interest of the other party. At the same time, negotiators should be sensitive to the use of influence tactics by the other party. Cialdini (2001) has identified six different categories of influence: reciprocity, consistency, social proof, liking, authority and scarcity as described below:

Encourage Reciprocity

The principle of reciprocity means that if someone does a person a favor, that person must return the favor, since he or she feels obligated to do so. In negotiation, reciprocity is often used by one party to seek concessions from the other. A negotiator feels indebted to the other party to make concessions because the party did something for the negotiator in the past. The other party will tactfully remind the negotiator that he or she owes the party the concessions. Basically, there is nothing irrational or illogical about reciprocity in negotiation. However, a negotiator should be careful not to yield too much ground in the name of reciprocity. In other words, the negotiator does not want to be taken advantage by the other party. The negotiator must weigh what the other party did for him or her and what he or she might do for the party to repay the favor. Nothing should be conceded to the other party beyond that. A situation to avoid is to give away concessions now with the promise of receiving concessions in future deals. Unfortunately, concessions received in the past are easily forgotten and the future deal hardly materializes.

Be Consistent

Psychologically, people like to be consistent in their behavior since inconsistency is a sign of irrationality. Following on the consistency principle, a negotiator should not agree to terms he or she cannot and/or do not want to follow through. For example, an exporter is negotiating with an overseas distributor about commission on sales. The distributor accepts the exporter's terms on the condition the exporter make adaptations to the product. The exporter agrees to such product adaptation, probably without thinking about what it might entail, and the negotiations are successfully completed. Now, to be consistent, the exporter must comply with the product adaptation even if it costs him more than he had anticipated. The principle of consistency influences him to make the agreed-upon adaptation.

Provide Social Proof

People often justify their behavior based on what others have done or might do under similar circumstances. In business negotiation, the other party may ask for concessions using the principle of social proof. For example, the overseas distributor may influence the exporter to pay for the transportation costs of defective products that are returned, citing the example of other foreign companies the distributor represents. The distributor convinces the exporter using the behavior of other companies as proof that it is the exporter's responsibility to absorb the transportation costs of returns. If the exporter's information shows that statement to be untrue, the only way he can counter the social proof advanced by the other party is to demand evidence of the proof. If the exporter's knowledge of the industry practice shows that the transportation costs of returns are absorbed by the distributor, the exporter should obtain some proof to support it. He can then submit his own social proof and discount the distributor's argument.

Be Likeable

Generally, people are more agreeable with those they like. A negotiator is more likely to make concessions to those of the other party he or she likes. Thus, the other party in negotiations can take steps to make the negotiator like him or her, which leads the negotiator to making the concessions the party desires. A negotiator can use the liking principle to his or her advantage in negotiation by making the other party like him or her. This can be done in various tangible and intangible ways. For example, the negotiator can present the other side with a gift or talk positively about the other party's country. Once the negotiator has created an atmosphere in which the other party likes him or her, the negotiator will find it easier to seek concessions in negotiation. Savvy negotiators go a long way in making themselves likable, humorous, knowledgeable, and friendly so the other party likes them. By the time negotiation begins, the other party believes he or she is dealing with an accomplished friend. This influences the other party's behavior favorably.

Assert Your Authority

Behaviorally speaking, people accept the opinions, views, and directions of those they consider an authority on the subject. When people are sick, they accept the advice of a doctor because they consider the doctor an authority on health matters. Similarly, in negotiation, the other party will accept a negotiator's offer without much questioning if the negotiator is viewed an authority. It is important, therefore, that people assigned to negotiate on one's behalf are capable, are fully knowledgeable about the details of the situation, and can

present themselves as authoritative. A weak person lacking the necessary authority might give in too soon, providing more concessions to the other party than necessary.
Authority has another connotation in negotiations. It has to do with the authority of the negotiators to finalize the agreement on behalf of his or her organization. If the negotiator does not have the authority to make a deal, the other party will be less willing to strike a deal. For example, if the other party is seeking concessions and the negotiator has no authority to make concessions, the other party might as well end the negotiations. In the other party's eyes, the negotiator has no credibility. Whoever is responsible for handling negotiations must be equipped with adequate authority.

Stress Scarcity

It is human nature to want things when they are rare, are hard to get, or are in great demand. This tendency applies to negotiations as well. In accordance with the principle of scarcity, a negotiator should make different attributes of an offer seen rare and scarce, which would result in the other party wanting them. A negotiator may be willing to include those attributes in his or her first offer but should hold them back, emphasizing that such attributes cannot be provided.
Since the negotiator makes the attributes seen scarce, the other party wants them at all costs. The negotiator then makes them available, grudgingly, as negotiations advance. Such concessions will be highly valued by the other party, and the negotiator might obtain additional concessions in return.
For example when you are searching for a hotel on internet often the hotel you are interested mentions that only 2 rooms are left at this price or that several people have just booked a room at the hotel. These practices stress the scarcity of time and the scarcity of room availability to trigger a rapid decision on your part.

Summary

Persuasion is one of the core skill for negotiating mutually satisfying outcomes. When interacting with the other party, it is essential to word the proposals in a way that the other party's understands. Persuasive negotiators make sure to say what the party would like to hear while making the other side feel important. During the exchange of proposals and counterproposals, it is essential to involve the other party in the negotiation process giving them a sense of ownership thereby letting the other party feel that your ideas are theirs. This helps the other side to persuade themselves of the benefits of your proposal. In other words, your objective is to make the other party part of the solution and not part or the problem. During the preparatory and interactive phases, persuasive negotiators make sure to know how to counter objections and apply influence tactics to achieve their goals. Throughout the discussions, persuasive negotiators display a positive attitude, avoid being disrespectful and do not criticize the other side proposals or competition. Regardless of how well the arguments are developed, the other party will not show interest in your proposals as long as the other party is convinced that you care about their needs.

Persuasive negotiators able to control their emotions and knowing how to counter objections in a constructive manner, improve their chances to meet their goals. By resorting to influence and persuasion tactics, negotiators are in a powerful position to lead the discussions to agreement. As the negotiations progress toward closing, persuasive negotiators tend to shift their discussions to their future collaboration including how they will work together in implementing the agreement. In the event, it is not possible to reach a mutually beneficial agreement at least do your best to preserve the relationship particularly in relationship-oriented cultures as negotiators seek a relationship first and reaching agreement second.

Table 1 below lists some of the dos' and don'ts concerning persuasion and influence in a negotiation context.

Dos'

- Establish credibility and authority
- Find common ground
- Build rapport with the party
- Switch from self-oriented to other oriented
- Communicate clearly and switch from "me" to "we" and from "no" to "yes"
- Provide evidence in support of your proposal
- Maintain control of emotions
- Display patience and empathy
- Rely on testimonials, personal examples, metaphors , narratives, anecdotes
- Encourage reciprocity
- Stress scarcity
- Congratulate the other party when concluding the negotiation

Don'ts

- Make false promises or exaggerate
- Provide too many options/alternatives
- Fail to involve the other party in seeking solutions
- Make assumptions without checking
- Criticize the other party or competition
- Assume the other party's underlying interests and motivations
- Dominate the discussions
- Try too hard to influence the other party
- Make threats or intimidate the other side
- Avoid being defensive or show anger
- Engage in conflictual arguments

Table 1 Persuasion and Influence: Key Points to Remember

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Chinese Strategic Systems: A View from Huawei

*Hong Liu**

Abstract

Chinese firms have emerged increasingly to become challengers to the leadership positions of the technological sectors traditionally entrenched by Western firms, and yet not enough has been known about how Chinese firms strategize or organise their businesses. This paper presents a case study of a leading Chinese firm, Huawei, from a Chinese perspective. It finds that the firm's strategic development and organisation are embedded in Chinese tradition, with Chinese strategic idiosyncrasies. Managerial implications are discussed.

Introduction

Leadership positions of many industrial sectors in the West have witnessed an increasing threat and challenge from Chinese companies; Western companies have yet to understand how Chinese companies strategize and organize. One of these companies is the Chinese multinational firm, Huawei. Founded in 1987, it has become one of the leading players in the information and communication technology (ICT) industry since 2010. Notably, the firm has been subjected to extensive research in the West, being a hot case study at many Western business schools. However, most studies on Huawei have been carried out by applying Western frameworks or from a Western perspective. This paper is intended to look into the company's

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strategy and management from an 'objective' or a Chinese perspective, addressing its strategic implications.

A Firm Rooted in Chinese Tradition

Huawei represents a successful company that is a hard-core follower of Chinese tradition. It was founded in 1987, with its headquarters located in Shenzhen, Guangdong. However, it is now a leading global ICT solutions provider. In 2012 Huawei became the world's largest company in the industry and in 2016 sales reached about $61 billion.

The factors that have driven Huawei's success over the past two decades have manifested strong Chinese characteristics. The founder is an admirer and a follower of Mao Zedong, the founding father of People's Republic of China,(directly or indirectly), and his strategic thinking has been shaped by Chinese tradition, to a great extent, through Mao Zedong's strategic mind.

As a result of cultural tradition, Chinese private firms tend to be dominated by key individuals, founders or CEOs, who are seen as godfathers of the organisation. Huawei's development depends on the following factors (1) the strategic mind of its founder, Ren Zhengfei, (2) his personal qualities and influences and (3) Huawei's strategic implementation system.

Ren Zhengfei's Strategic Mind

Liu (2015) identifies a number of idiosyncratic factors of Chinese strategic thinking such as *Tao*, *shi*, holism and dialectic, stratagem and agility. These factors are discussed as follows:

Tao

This is a uniquely Chinese category of strategic thinking. A frontrunner of a significant undertaking is characterised by the embracement of *Tao*, which is reflected in the vision, rightfulness, justice, and high standard of ethics of the practitioner, abiding by the law of nature. Since the start-up of Huawei, the founder has had a great vision and ambition for the future of this venture, which is reflected in its name: Huawei means both ‘China can’ and ‘splendid act’[1].

After Huawei’s establishment in 1987, Ren articulated his vision in 1994: the industry would be divided into three players in the world in the future and Huawei would be one of them; in 1997, he further stated that Huawei would be the world’s first-class telecom enterprise. In 2010, Huawei entered the list of Fortune’s Global 500 at 397 as the only Chinese private company in the list, climbing to 129th in 2016 and 83 in 2017.

Ren Zhengfei, as the founder, only holds 1.42% of Huawei shares, while the remaining 98.58% are owned by about 70,000 of Huawei’s 150,000 employees[2]. It is Ren’s conviction that the company’s shareholding should be shared by talented and ambitious people committed to the company. This action reflects Ren’s *Tao*: sacrifice, self-discipline, unselfishness and endurance. This share structure is intended to inspire the spirit of assiduousness, teamwork, and zeal within Huawei.

After ten years of development since its founding, Huawei accumulated ample cash in its coffer. Instead investing in China’s property market, a trendy option then, Ren put the company’s money into the establishment of a ‘Huawei

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[1] The Economist (2011). *“The long march of the invisible Mr Ren.”* The Economist, June 2, 2011.

[2] De Cremer, David & Zhang, Jess (2014). *“Huawei to the Future.”* Business Strategy Review, 25(1), 26-29.

University' in Shenzhen to provide technical and technological training to its employees and stakeholders. This non-profit-driven action reflects the value or the *Tao* that Huawei has followed. However, in 2003, when the Internet bubble burst, many potential clients visited the 'Huawei University' and realised the difference between Huawei and Western multinationals. As a result, many signed contracts with Huawei, involving huge sums of investment. By the end of 2012, millions of people from telecom operators and clients of over 100 countries had attended training programs at the University, enhancing the credibility and image of Huawei internationally and cultivating countless potential clients.

Although Huawei has been in the top league of industry, its technology has not been as 'advanced' as its competitors. However, Huawei realised and followed the 'rule' of game or *Tao*. Metaphorically, in high-tech sectors, those with core technology can reach the high ground of the market. However, who can stay there with sustainability depends on the 'stamina' of consumption (cost), not on the level of advance in core technology; the 'stamina' is determined by a combination of both core technology and low cost. Huawei has outdone many of its strong competitors in the international market because of its advantage of the combination.

Shi

The start-up of Huawei reflected Ren's sensitivity to *shi*, generally described as 'situation', 'potential', 'power' or 'energy' in the late 1980s, when China witnessed the trend of economic reform. It was an era in Chinese society with dynamics and upheaval, entailing both opportunities and risks. It was a dramatic step for Ren to make such a transition from being an army officer, a highly respectable profession or image, to a small 'trader', at a lowest level of social strata. At the time, knowing nothing about 'telecom technology', Ren had the 'right time' and 'right place'. Headquartered in Shenzhen, which was designated a 'Special Economic Zone' for the experiments with capitalism, Huawei utilised the *shi* of economic reform to the letter.

In a legal battle with Cisco Systems, a leading US firm and an industry leader, (in 2003), Huawei borrowed its *shi*, its reputation and high-profile campaigns, which were supposed to result in severe reputation and psychological devastation on Huawei, but instead, it spectacularly promoted Huawei as a worthy opponent[3].

In 1996, when most telecom equipment makers were keenly working on fixed-line based digital telephone exchangers, Huawei realised that the market of fixed-line telephone would be saturated soon and thus invested heavily in R&D on Internet Protocol (IP). While other companies were still 'wait and see', Huawei took the risk of embarking on the development of broadband access network products. When the Internet market emerged in China, Huawei and ZTC already dominated and shared the market. In 2006, Huawei and ZTC were the only two Chinese companies that joined the list of the world's top eight telecom equipment providers. Many multinationals with strong financial and R&D resources missed the train of telecom equipment and service because they have been one step behind the trend (*shi*).

Holism and Dialectic

In the West, innovation is greatly encouraged and aggressively pursued. However, Ren has cautioned his R&D staff to take a 'holistic' or 'moderated' approach. It has been found that the companies who are 'over' innovative, with their products ahead

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[3] Liu, H. (2015), "*The Chinese Strategic Mind*", Edward Elgar Publishing, pp.183-186.

of what the market would accept, suffer as much as those not innovative enough, with examples including Fujitsu, NEC, and Motorola. Therefore, Huawei's innovation strategy has been that it strives to be 'better' than its competitors by 'a half step' or 'slightly'.

Western firms generally have a written or explicit strategy that provides the firms with direction and objectives as well as the means to achieve them. They are like ocean liners that navigate towards a clear direction set by the captain. However, Huawei has seen itself as a medium-sized liner, sailing on oceans under a different guidance system from that in the West, i.e. the Middle Way principle. Ren explains "the business environment changes so rapidly that it is difficult to know the correct direction of the future and thus impossible to design a perfect business model. Therefore, Huawei should strive for unity internally and seek for cooperation externally, so that together the future direction will be identified jointly".

Stratagem and Agility

With different reasons to justify why Huawei is not listed on the stock market, Ren's unexplained reason, is that , as a private company, Huawei does not need to disclose its financial details, and thus can keep its cards (strategies) close to its chest.

Mao Zedong's strategic mind and approaches have influenced Ren Zhengfei in many ways. One of Mao's famous speeches delivered in 1938 has been "A firm and steadfast political direction, a work style of arduous struggle, plus responsive and flexible strategy and tactics." The Economist wrote "In an attempt to keep the company nimble, Huawei recently introduced a system in which three of its bosses take turns, six months at a time, at being the chief executive." [4]

During the first ten years of founding the company, stratagem and agility were the key to the company's survival and development. At the time, Huawei could not match major competitors' technology and resources such as Alcatel, Ericsson, and Siemens, and could not get a foothold in cities. It had to start Mao's strategy of the "encirclement of cities from the countryside." The Economist (2011) noted:

> 'Using the countryside to encircle and finally capture the cities' is one of Mr Ren's business strategies. Finding it tough to sell to carriers in China's big coastal cities, where state-owned equipment makers and foreign vendors reigned supreme, Huawei first went for the provinces. Offering technically advanced but cheaper equipment, and deploying armies of salespeople, the firm quickly managed to persuade local operators to buy its products. It then moved on from there. [5]

Alcatel-Lucent Shanghai Bell, founded in 1984, is the first Sino-foreign joint venture in China's telecom industry. In the 1990s, China's telecom market witnessed a period of heightened demand, when there were suppliers of many countries with different systems, known as the 'seven countries with eight systems,' leading to confusing systems with prohibitive prices. As a result, Chinese buyers had an eye on Shanghai Bell and queued up for its PBX products, and within

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[4] The Economist (2014). *"The great disrupter's new targets: Huawei."* The Economist, September 20, 2014, 61-62.

[5] The Economist (2011). *"The long march of the invisible Mr Ren."* The Economist, June 2, 2011.

three years, its model S1240 took as much as 50% of market share.

During the mid and late 1990s, as a result of emerging new Internet access technology, Shanghai Bell could not meet market demand, which had not been taken seriously by its top management. Having identified the window of opportunity, Huawei applied Mao’s strategy of ‘concentrating a superior force to destroy the enemy forces one by one’ and, utilising all its technological and financial resources, it developed competitive Internet access products within a short period of time. It started to take market share away from Shanghai Bell. Consequently, Huawei gradually entered the telecom equipment market and subsequently further developed fibre optic, digital communication, and intelligent networking products and overtook the sales of Shanghai Bell in 1998. In 1999, when broadband technology became the dominant form of Internet access, Huawei reinforced its advantage over Shanghai Bell and began to make inroads into the city market and break the monopoly of the ‘seven countries with eight systems.’ At the time, the technical characteristics and performance of Huawei’s products were comparable to those of multinationals such as Cisco, Alcatel-Lucent, Nokia-Siemens Networks, and Juniper Networks, with lower prices and better services, and thus Huawei successfully completed its strategic transition from the countryside to the cities by 2003.

In the process of internationalisation, Huawei utilised the same strategy, it first entered ‘less’ developed markets and then developed markets. Huawei entered Russia in 1996. In 1997, Russia suffered a depression, without signs of recovery; thus many Western multinationals such as NEC, Siemens and Alcatel withdrew from the Russian market. However, Huawei stayed and waited, and three years later signed a contract with Ural for PBX systems and with Moscow for mobile network systems. In 2001, Huawei signed a contract with the Russian

National Telecom worth over USD 10 million to supply GSM equipment. In the following year, a large contract was signed to provide a long-distance fibre optic transmission, the DWDM system, between St. Petersburg and Moscow. Now Huawei is the largest foreign investor in Russia and has over 50% of market share in the Russian broadband network market.

In 2000, Huawei entered other Asian markets such as India, Indonesia, Thailand, Bangladesh, Cambodia, Nepal, Singapore, Malaysia, and United Arab Emirates and became the major supplier of GSM/CDMA systems in these countries. The Russian experience was replicated in the Middle East, North Africa, South Africa, Latin America, North America, Asia Pacific, and Europe. In 2004, Huawei signed a contract worth €200-400 million with Telfort. In 2005, Huawei became a qualified supplier of the BT 21 Century Network (21CN) and in the same year, Huawei forged an alliance with Vodafone, the world's largest mobile phone operator.

Personal Qualities and Influences

In a Chinese private company, its development is inseparable from its founder's personal background and qualities. Ren Zhengfei was born into a family with an educational tradition. His father, born in 1910, was a university graduate, a rare talent to be found in those days, and worked as an accountant and a schoolteacher. After the founding of the People's Republic of China, he first became head master of two schools, located in a minority area in Guizhou, a region that was renowned to be underdeveloped, before the Cultural Revolution (CR), which brought about devastation to China's education. After the CR, his father became a headmaster at another school, which later became distinguished and exemplary in the region, with 90% of graduates enrolling in universities.

Ren's mother was a senior math teacher at a school, exhibiting great caring, loving and kindness to students at the schools, while at home she was industrious, thrifty and a devoted mother to her children. In 2001, she was taken into a hospital after a car accident, and registered under the name of 'unknown', with RMB20 (less than 2 pounds) in her pocket, while her son had just delivered over RMB2 billion taxes to the state. Such was the family in which Ren's parents were altruistic, generous, caring, visionary, assiduous, and frugal. The qualities of his parents exerted a positive influence on Ren, laying a foundation for the success of his entrepreneurship.

As a result of his upbringing, cultivated in him industriousness, perseverance and determination. For instance, once a customer needed a HJD exchanger urgently. To develop the product, he concentrated all the funds and personnel, including over 50 R&D staff, to 'fight' the 'life and death' battle. They worked, ate and slept in a rented office building, day and night, consecutively for several months, and finally delivered the product as required by the contract. If the undertaking had failed, the company would have become bankrupt. As many newly recruited researchers had to do several shifts, working and sleeping on mattresses in the office, Huawei acquired a 'mattress culture' reputation.

Another quality inherited from his parents is Ren's thirst for learning. He once said "if you do not work hard for a day, you may be out of the game; if you do not study and learn for three days, you cannot catch up with Cisco, Ericsson and Alcatel". Ren has a strong capability to learn, and reads both Chinese and Western relevant literature, mainly history, military and philosophy.

Huawei's Strategic Implementation System

The Basic Law of Huawei

During the first stage of development, focusing on the rural market, Huawei adopted a 'rough' (vs. professional) management approach with a successful outcome. At the second stage of development, with the strategic focus on cities, it had to compete head on with MNCs such as Lucent and Siemens. Thus, Huawei had to manage the company in a similar professional way to win. It needed to develop an effective management and organisational system. Inspired by the role of the Basic Law of Hong Kong, Ren started to contemplate the issuance of a Basic Law of Huawei as policy guidelines.

Having met with major consulting companies, including McKinsey, BCG, A.T. Kearney, and PwC as potential service providers, Huawei had the perception that the concepts and approaches of these companies were predominantly rooted in the Western tradition. They believed that, without incorporating elements of Chinese culture, it would be difficult for Huawei to digest those concepts and approaches, with possibility of losing Huawei's identity during the process of Westernisation. After a meeting with five professors from Renmin University of China, Ren announced Huawei's decision that "we invite the five professors to draft the Basic Law of Huawei because they understand not only Western culture, but also the Chinese one, and they would be able to utilise Western culture to 'improve' Chinese culture, this is in line with Huawei's requirements".

In the process of drafting, the group combined the teachings of Sun Tzu's *Art of War* with the corporate culture, mission and responsibility of world's renowned multinationals such as IBM, HP, and Intel, and laid out the core values and fundamental policies that would govern the company's organisational and management systems.

Corporate Culture and its Evolution

The Basic Law provided a map for the company's direction, but Huawei also needed 'drive' or 'unity' to move ahead. During the early period of development, Huawei's staff had to travel to remote rural areas and countries to develop businesses and to act swiftly in Chinese cities, where powerful MNCs dominated, to seize the window of opportunity that opened only for a short time. A so-called 'wolf culture' of Huawei was therefore born under the particular environment. Ren explains "the development of enterprise should develop a batch of 'wolves,' which has three characteristics: (1) the acute sense of smell, (2) the offensive spirit with indomitableness and self-sacrifice and (3) team work. The expansion of enterprise requires that these three elements are included in Huawei's team building and organizational culture".

The success of Huawei firstly lies in its rightful strategic thinking, which has then been realised through its 'wolf-like' corporate culture. This unique culture has been supported and promoted through its reward and punishment systems. This system is characterised by the 'three heights': high pressure, high performance and high reward. The importance of this system can never be over emphasised during its earlier development. However, from mid 2006 onwards, the number of employees reached over 60,000, with myriads of foreign nationals and foreign-residential Chinese employees. The new multicultural environment has posed a series of challenges in Huawei. For instance, the pursuit of individual performance may result in the employee ignoring the company's overall performance and customer value, which is at the core of Huawei's mission. Having realised these challenges, Ren anxiously contemplated a solution to the problem, until he was inspired by a Chinese traditional dance during the television performance celebrating the 2005 Chinese New Year. The dance was known as '*qian shou guan ying*' (or the goddess of mercy with thousand-hands and thousand-eyes), which was watched by the Chinese people nationwide, with an exceptional touching effect on the hearts of millions of people. The dancers, consisting of deaf-mutes, caused a sensation in less than six minutes. The dancers and director demonstrated the spirit of pursuing excellence, with indomitableness and perfect teamwork, and yet they were not moved by 'reputation' because they could not hear the aloud and unending applause. Such an inspiration gave birth to *qian shou guan ying* as the corporate culture of Huawei in the new era.

Mao-style Movements

Mao Zedong utilised political campaigns to consolidate his authority. As a follower of Mao Zedong, a similar action has been taken within Huawei. The Economist (2011) note: "Another tactic Mr Ren copied from Mao is ideological education. In the early years, he had employees sing revolutionary songs. Even today, the thousands of new recruits hired every year undergo a six-month course that includes two weeks of cultural induction on the Shenzhen campus and an internship on the ground, such as helping to set up base stations. This is when new Huaweians are supposed to acquire the "wolf spirit" which is said to drive the firm on."[6]

Mao Zedong had studied and noted the regularity or pattern of the rise and fall of nations and political parties and contemplated how to prevent the fatigue of nations and political parties. Thus, the style of 'movement' was invented to achieve the purpose of societal transformation, getting rid of organisational laziness and unhealthy elements, and energising the party and nation. Mao used a 'dialectic' term to describe his approach: achieving a transformation 'from a national state of

[6] The Economist (2011). *"The long march of the invisible Mr Ren."* The Economist, June 2, 2011.

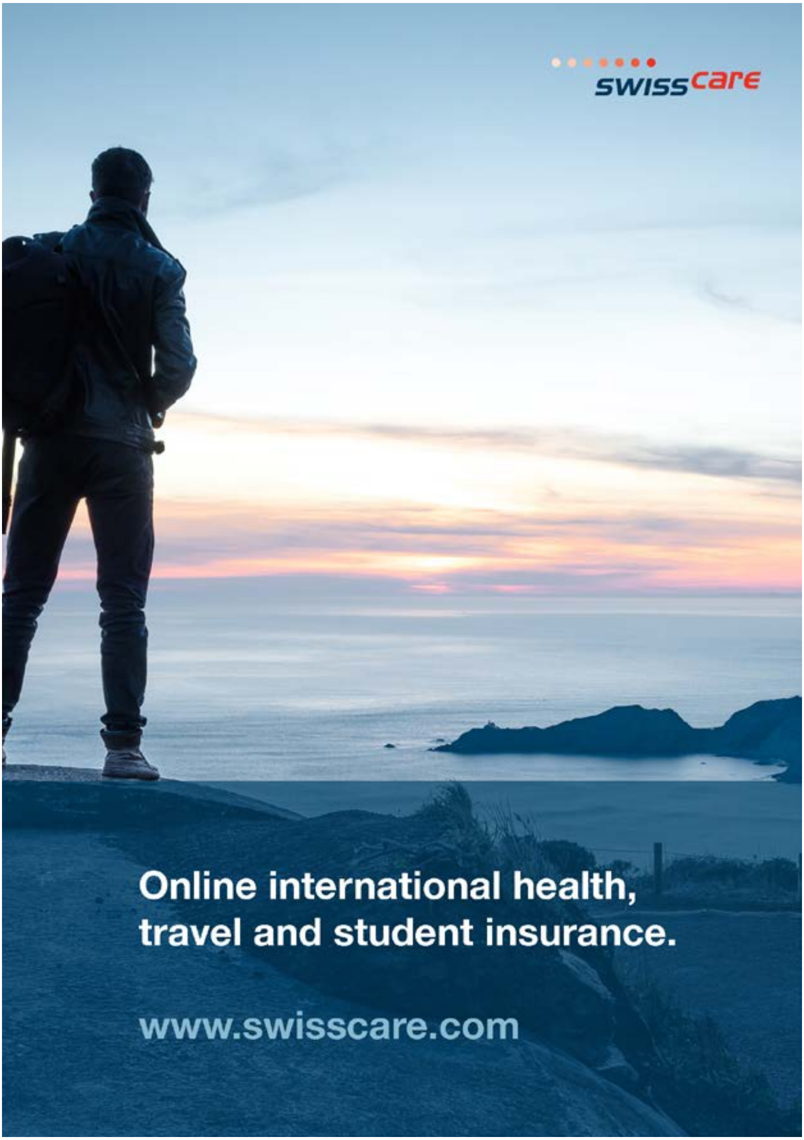
chaos and tumult to that of stability, unity and order'. Influenced by Mao's thoughts and practices, Ren adopted a similar style of movement to Mao's within Huawei to energise the organisation.

The Mao style of 'movement' in Huawei has been one of 'criticism and self-criticism'. Having 'borrowed' this idea and approach, Huawei has mainly emphasised 'self-criticism', and deemphasised 'mutual criticism,' which may cause frictions within the organization. 'Self-criticism' has become part of the Huawei's core value defined by Ren, in order to keep its employees upbeat and energetic in the environment of tough competition. Ren has expressed his view that the foundation for long-term stability and sustainability in Huawei lies in the fact that the successive leader of Huawei accepts the core value (of self-criticism) and has the ability to carry out self-criticism. The viability of a company depends on whether it is able to perform self-criticism and understand grayscale.

The movement of 'self-criticism' has been going on within Huawei for twenty years. Once a month, a 'democratic-life meeting' is held, in which everyone, from top management to ordinary employees, has to attend and speak about their own 'inadequacies', with an analysis of the causes of these inadequacies. Consequently, and surprisingly, the outcome of this kind of movement has not caused frictions within the organisation, but reinforced the unity of 150,000 employees; nor has it brought about unprincipled obedience to senior management, but maintained the personality of each individual. Huawei succeeded because of the personal involvement of the top leader in the movement, without fearing the loss of face and the exercise of grayscale (or simply the middle way principle), without anyone going to extremes.

Conclusions

Huawei represents one of the best companies that has been developed by relying on Chinese tradition and strategic thinking. Through this case study, one may understand the key factors that influence the development of Chinese companies, their leadership structure and organisation, strengths, and weaknesses, as well as the idiosyncrasies of Chinese strategies and their implementation. When analysing strategies and management of Chinese companies, Western firms should avoid applying MBA-style frameworks/models but look into them from a Chinese perspective, so that a strategy built on a true understanding of Chinese rivals may be developed.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