Trust as the Foundation of Finance[1]

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The idea of trust as central to commerce is as old as the hills. Over the years, many academics have reflected on this idea - Adam Smith's, "Theory of Moral Sentiments," published way back in 1759, maintained that markets cannot exist without fairness, altruism and trust. Antonio Genovesi, Italy's first professor of political economy (1713-1769) argued that public trust was the link holding civil society and civil economy together.[2] The idea of trust is even older than is indicated by these sources. In the first millennium CE, long-distance commercial networks existed atop a substrate of trust, catalyzed also by the spread of Buddhism from India to China.[3]

In fact, trust is the bedrock of any form of economic exchange and banking of course is the quintessential economic exchange. Regardless of the extent of contractual sophistication, legal infrastructure, blockchain or even machine learning, economic exchange is not possible without an underlying fabric of trust.

Despite this historical recognition of the importance of trust, if you look at economics textbooks today, there is nary a reference to trust. It's all about demand and supply curves, and price and quantity. But these analytic models are only abstractions to understand processes of exchange that are premised on trust.

Trust is the reason behind the success of many modern-day enterprises. It is trust that helped Alibaba succeed in China, a market that had traditionally been very distrustful of online commerce. Jack Ma, Alibaba's founder, repeatedly emphasizes that unless he had devised concrete interventions to gain the trust of would-be buyers on the internet in China, he would have not been able to build his giant enterprise. It is trust that helped BRAC emerge from the embers of a strife- torn and crisis-ridden Bangladesh in 1971.[4] Today, BRAC is the world's largest and possibly best run NGO. Its founder, Sir Fazle Hasan Abed, who is an iconic figure amongst the philanthropists of the world, emphasizes the importance of trust in initiating and running all of BRAC's various activities, including the BRAC bank and BRAC's extensive self-sustaining, profitable microfinance activities. Similarly, the success or failure of large-scale social programs fostered by governments, such as India's Aadhaar (a unique biometric identity scheme for all residents) or Brazil's Bolsa Familia program (a conditional cash transfer program), or, can be linked

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[2] I've been educated about this history by the work of the business historian, Sophus Reinert, a colleague at Harvard.

[3] Tansen Sen, Buddhism, Diplomacy, and Trade: The Realignment of Sino-Indian Relations, 600-1400 (Honolulu: University of Hawaii Press, 2003).

[4] The acronym has stood variously for Bangladesh Rehabilitation Assistance Committee, Bangladesh Rural Advancement Committee, and lately Building Resources Across Communities.

[5] Tarun Khanna, Trust: Creating the Foundation for Entrepreneurship in Developing Countries (Penguin Random House, India; Berrett Koehler publishers, Oakland California, 2018).

to the prevalence or absence of trust. Part of the lesson that shows up repeatedly in my book, Trust: Creating the Foundation for Entrepreneurship in Developing Countries[5], is that to build a world- class organization in the developing world, you have to engage with multiple actors in your ecosystem.

As a corollary, the unraveling of trust can have catastrophic consequences. One sobering example is provided by the tragic Andhra Pradesh microfinance crisis in October 2010. Andhra Pradesh had seen a high proportion of loan defaults, with attendant disastrous social and health consequences for the borrower's standing in the rural community. Growing non-repayment of loans affected the microfinance sector adversely, since microfinance firms were dependent on repayments to replenish capital needed for further lending. Microfinance firms, it was alleged, used their status as one of the scarce alternatives to moneylenders for otherwise downtrodden women, to collect loan repayments in an unethical way, further driving the borrowers into despair and penury. The allegations further elaborated that these firms were able to do so since the regulatory and self-policing infrastructure for these firms was not fully developed.

In response to these developments, the Andhra Pradesh government issued an executive order that restricted lending by all microfinance companies in the state, requiring them to go through local government channels to collect repayments, and to take prior approval for each new loan. Local officials were also given the power to unilaterally and arbitrarily revoke loan registrations. This hampered the ability of microfinance firms to operate in the state and created a capital crunch.

In addition, the firms also faced political pressure to write-off pending loans. While the ostensible goal of these measures was to protect poor women; the causal factor, correctly identified by The Economist magazine, was this: "The growth of microfinance has reduced local politicians' ability to use rural credit as a tool of patronage. That puts microfinance institutions (MFIs) in the firing line."[6] Consequently, the microfinance industry collapsed. SKS Microfinance, (SKS) on whose board I have served since 2009, wrote off all its loans in Andhra Pradesh, which at that time accounted for 29% of its book.[7] For other firms that were wiped out, bad loans accounted for as much as three-quarters of their books. About a half-dozen or so major microfinance firms were forced into bankruptcy, and only one of those managed to emerge from bankruptcy proceedings. The impact of this crisis was financial, emotional, and psychological. Firms lost out on capital, and borrowers were left to the mercy of unscrupulous moneylenders. Human lives were lost, on the borrower side as well as the lending side. There were some deaths in the families of the loan officers - one's pregnant wife lost their child while he was in custody. The overall increase in distress was palpable.

The Indian press, in particular, the vernacular press, also played a role in this crisis. Operating out of the glare of folks outside Andhra Pradesh, it reported on the crisis in a superficial manner. Thus, it did not serve its watch-guard role; if anything, it fanned the flames of distress. The global press printed a few articles that didn't have much impact, as it didn't have a wide enough following either in Andhra Pradesh or in India at large.

The crisis brought SKS to the brink of bankruptcy. The board and management decided not to file for bankruptcy, but to weather the storm. They resolved to rebuild trust with the regulator, lenders, customers and employees. SKS, being an NBFC (non-banking financial company), is not permitted by regulators to raise money through deposits and is instead dependent on loans from mainstream banks (who, in turn, rely on it to re-lend to harder-to-reach populations). To remain in business, it needed to regain the trust of its bankers. It endeavored to

[6] "Microfinance in India: Discredited," The Economist, November 4, 2010, https://www.economist.com/finance- and-economics/2010/11/04 discredited, accessed October 2018.

[7] I refer to BFIL, Bharat Financial Inclusion Limited, with its former name SKS Microfinance, since the latter name was in effect during the crisis.

do so by repaying all its outstanding loans. It wrote off its entire loan book in Andhra Pradesh, while ensuring that it met the needs of its customers in other states. Simultaneously, it worked on improving its operational cost efficiency. By 2012, the firm had stabilized, but its membership had almost halved from its peak of 6.8 million members in 2010, its loan disbursements had shrunk by 70% and its stock price had crashed from the peak of ₹1,355 (soon after its IPO in 2010) to ₹56.

Once the market had settled down, SKS offered qualified institutional placements (QIPs) at a very low price to facilitate growth. This QIP was successful and SKS had two follow-on offerings in 2014 and 2016. By 2018, its stock price had come close to its previous peak. Its operational cost as a percentage of revenue had fallen to 6.6% from a peak of 15.4% in 2012. Its membership had grown to 7.3 million.

While SKS managed to pull itself out of the crisis, things did not work out well for the sector in Andhra Pradesh. Andhra Pradesh microfinance was decimated. After all these years, SKS Microfinance still doesn't lend in Andhra Pradesh because the firm doesn't trust the state's system. If such shenanigans were to repeat themselves, I don't think the firm would have a mechanism to protect itself. The fact that SKS was not allowed by the Indian regulator to convert to a bank is itself likely a residue of distrust from the Andhra Pradesh crisis. When you live in a troubled neighborhood, you can only dissociate yourself so far from that stigma.

Eventually, the institutional infrastructure of India worked to resolve the microfinance crisis, though this took a fair amount of time. The RBI set up a committee under the leadership of Y.H. Malegam to study the issues and concerns in the microfinance sector. While the committee was conducting its research, a number of court cases related to the crisis were also filed. The committee patiently heard the perspectives of all stakeholders and reached reasonable conclusions. The Board members and I spoke to eminent people in the government including senior advisors to the Ministry of Finance and other concerned regulators.

SKS's recovery and the decisions it took during the crisis to aid this recovery has important lessons. During the crisis, SKS's mission was to save the company, rebuild trust and rebuild the reputation of the industry. All decisions sought to answer the following questions: What could the firm do to regain the trust of its customers? And how would they reassure apprehensive employees whose livelihood depended on the firm?

To cultivate this trust, SKS took a series of short-term actions (within six months after the crisis), and then some long-term actions.

The short-term actions included shrinking the company to meet the firm's commitments, conserving its resources and paying the banks. It managed to repay the banks without taking a so- called (financial) "haircut." In a situation where everybody was declaring bankruptcy, the banks saw the firm as an outlier that repaid all its loans. SKS thus built trust with the banks. Other short- term actions related to employees moving out of the company. Many employees chose to leave because the firm was shrinking, others, because they were legitimately terrified by the campaign against the industry. Many others opted to stay with the firm despite the tough circumstances.

Another symbolic action had to do with the commitment of the Board. The Board members retained their composure. We met multiple times despite concerns that some of the firm's senior leaders could be arrested and despite receiving intimidating notices regarding potential court proceedings. A number of the firm's personnel were taken into custody. Further, nobody on the Board quit, even though it was unpleasant to be on the receiving end of some of the uninformed content in the media.

SKS also diversified its lending and moved out of Andhra Pradesh. It put in place more stringent norms for exposure to states, districts, branches. It revisited its safeguards, based on its better understanding of warning signals and the frequency with which these needed to be monitored. Most investors stood by the firm, some even invested further through the subsequent QIPs, confident that the firm would survive and ultimately thrive.

Finally, all through the crisis, SKS attempted to take the high road, refusing to denigrate any party in the ecosystem, and trying wherever possible to put forth its understanding of the situation.

Trust cannot be trivially cultivated through so-called 'cheap talk,' sloganeering that anyone can indulge in, at no cost to oneself. Credible commitments to trust-building actions are costly to the organization. It is not dissimilar from credible commitments made by individuals, where one might think that such actions have meaning if they are psychologically or financially costly to the individual, signaling that she's trustworthy.

Let me describe actions taken over the longer-term to rebuild trust. This relates to changing the institutional structure of the industry so that promises by the firms in the industry were seen as credible. Much less so than in the developed world, it is implausible to say that a well-running firm can operate in pristine isolation from the surrounding institutional infrastructure, including but not limited to the regulatory structures in place. The very definition of an 'emerging market' – and all developing countries have markets that are 'emerging' rather than 'emerged' – is that transacting parties have difficulty coming together confidently because the mechanisms to facilitate this are underdeveloped. This reasoning is spelled out in some detail in my co-authored book in 2010, Winning in Emerging Markets.[8] Indeed, it is inadequate to say that the regulator is just going to do its job and the firm is going to do its own, because it's very likely that the regulatory structures are underdeveloped. Companies and individuals therefore have a moral and civic duty as bankers and financial professionals, as well as in their own economic self-interest, to participate in the creation of a robust ecosystem.

Prior to the crisis, the microfinance industry had not worked explicitly towards creating a robust ecosystem. What happens when, for example, a firm obeys the letter and spirit of the law, but is cognizant that other less scrupulous actors are loath to do so? Specifically, in the Indian microfinance context, what happens when there is no adequately-functioning industry-wide credit registry? Not only was the regulatory infrastructure in the country inadequately developed, there was no well-developed, centralized credit registry with individual borrower level credit information that lenders could check against before lending. Firms were supposed to voluntarily submit data on their transactions and check against the registry to avoid excessive lending and to verify that their customers were not over-indebted, as often, people borrowed from one entity to pay another. This, in turn, may lead the borrower – the poor women in the Indian microfinance case – to either consciously over borrow because she feels she has no recourse in a situation of distress and can get away with it, or because she does not fully understand the implications of the extent of indebtedness into which she might fall. This was happening to an extent in the Andhra Pradesh situation. Although SKS scrupulously referred to the credit registry to check indebtedness, and reported its own transactions forthwith, several other firms did not fully comply. Therefore, the information received was incomplete, and did not adequately characterize the borrowing profile of each borrower. This likely compounded the distress into which some borrowers had fallen.

The microfinance industry, including SKS needs to collectively take responsibility for its part in this situation. SKS held itself to extremely high ethical standards, but when its management and Board noticed other firms engaging in unethical behavior,

[8] Tarun Khanna and Krishna Palepu, Winning in Emerging Markets: A Road Map for Strategy and Execution. (Boston: Harvard Business School Press, 2010).

they should have found a way to speak out. We all seem to have convinced ourselves that if we alone maintained the highest standards, that would be sufficient. That might meet the legal standard of appropriate conduct, but professionals should aspire to more in life than moral minimalism.

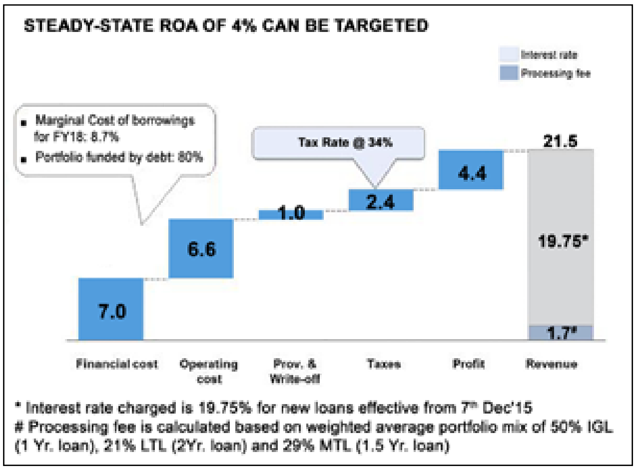
For entrepreneurs, it is insufficient to just create. You must first 'create the conditions to create' as I describe in my recent book on Trust, (referenced earlier). If the institutional infrastructure in a developing country is deficient, it means that it is the collective task of people in the society to build it up. Without that, it's very hard to get excellent productive enterprise of any sort - non- profit or for profit. This applies as much to finance and banking as it does to anything else. The industry as a whole would be remiss if we did not accept that we should be doing better on maintaining this institutional infrastructure.

Since the crisis, the entire industry has been working actively to build the credit registry that is functioning well, especially as specialized expertise about registries for microfinance firms develops and is codified in the industry. In addition, other longer-term measures such as RBI norms around caps on margin and caps on the number of microfinance firms that can lend to an individual, have helped the industry's firms to avoid extreme actions and thus cultivate stability and trust.

For SKS, the short-term actions were individually, organizationally and financially costly. They were taken to rebuild the trust and to commit to doing things in a particularly ethical way. They were done without wasting time, finger-pointing and blaming others, thus helping to foster trust.

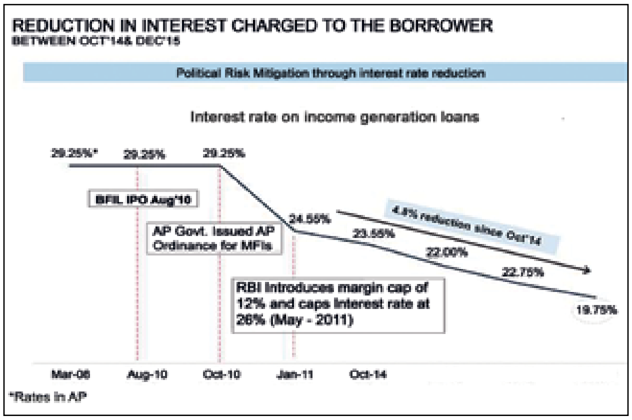
Wiser folks than I have always advised to focus on things you can control. So rather than worry about the regulator's actions, SKS has continued to focus on its management team, field operations, and customer relations.

This relentless focus on excellence in operations, which in turn requires an intense commitment to fostering trust and an inclusive environment within the company, has enabled SKS to progressively become more efficient by each passing quarter. I believe that the operational costs of SKS are among the lowest, controlling for loan sizes, in Indian industry, perhaps in the world. Other than the hiccup the company faced after the Government of India's experiment with demonetization, the company's metrics have been improving in most quarters. The net result of this increasing efficiency is that SKS is able to share a significant part of the additional resulting surplus with the customer by lowering the interest rate it charges. This is the right thing to do. The so-called 'waterfall' diagram below provides a precise and recent illustration of the components of the final interest rate charged to the end-borrower. Despite the RBI margin caps, and despite the prohibition on low-cost deposits, the firm is able to make a healthy return.



SKS does retain some surplus, so that it has capital for scaling further and can provide healthy returns to those who have invested in it, including during the time when its proverbial back was to the wall.

The short-term actions managed the immediate aftermath of distress, and the longer-term actions, including reinforcing the norms of using the credit registry, resulted in SKS's interest rates on loans decreasing from 30% in 2008 to 19.75% in 2015. As far as I know, this is the lowest interest rate charged by any microfinance firm in the world. Here is a graphic showing the steady reduction in interest rate charged by SKS over the years, a direct measure of sharing the fruits of the company's efficiency with the poor borrowers whom the company seeks to serve.



You can decide for yourselves whether the extent of sharing is appropriate, and some benchmarks to other situations around world might help. In Bangladesh, where the microfinance interest rate is capped at 27%, Grameen Bank's interest rate is 20% though the country's prime lending rate is lower than India's. In Indonesia, where there is no regulatory cap on microfinance rates, Bank Rakyat Indonesia charges 24%. However, in Mexico, which also does not have a cap on interest rate, Banco Compartamos charges between 60%- 70%. While this is criticized by many, that publicly traded company has found that its customers are consistently comfortable with this rate.[9]

Let me turn to the use of technology. In modern times, it is impossible to speak of any financial institution without engaging frontally with the issue of how the entity is embracing technological possibilities. Part of the reason for SKS's resurgence is that, over the 2010 to 2018 time period, it has invested steadily in technology to improve operational efficiency. One such investment is the introduction of 'kirana' points, a digitally enabled neighborhood retail store. Borrowers can visit these stores, which are owned by SKS borrowers themselves, to make basic financial transactions such as loan repayment, cash deposit and withdrawal and bill payment. They can also buy other goods from the store, and if required, borrow from SKS for these purchases. SKS disburses loans or cash by transferring money to the bank account of the kirana store, and the store, in turn, withdraws the money from its bank and disburses to the borrowers. For loan repayment or cash deposits, a reverse system is followed. This system is efficient, cheap and JAM (Jan Dhan Aadhaar Mobile)[10] compliant. A biometric device linked to a smartphone captures the borrower's biometrics, the Aadhaar based system instantly verifies the individual and then funds are instantly transferred to or from the borrower's Aadhaar linked Jan Dhan[11] account.

These investments in technology have been fruitful because the company has simultaneously invested in human capital. The company now needs to enhance training for its loan personnel because these are the people who are out in the field, working with retail customers, dealing with small amount of money and collecting cash. There has been a steady rise in percentage of disbursements that are cashless over this time.

[9] It is important to note that we are not quite comparing apples-to-apples here. The Mexican firm, for example, might make loans over different physical topographies than the Indian one; this in turn affects its operating cost structure (cash disbursements and collections). Further, Mexico still lacks a national identity system so that one key foundational aspect of trust – the lenders knows for sure the identity of the person with whom its transacting – is missing, and the firms and the industry writ large must incur the investments to compensate for what I've called elsewhere an 'institutional void.'

[10] JAN refers to the common man, DHAN is the word for wealth, the Aadhaar number is a biometric identity that one can think of as roughly equivalent in ubiquity to a social security number.

[11] To ensure financial inclusion, the government allowed citizens to open zero balance 'Jan Dhan' savings accounts. Each Jan Dhan account provided benefits such as accident and life insurance cover.

But these technology investments are insufficient. I believe that the company needs to invest more aggressively and be smarter still. One need only look to see how AliPay and WeChat have radically reshaped the payment landscape in China setting a trend for the future; ditto for the exuberance in our own 'fintech' sector in Mumbai, Bangalore and Delhi. While the fundamentals of banking will not change, the contours of how they are implemented in practice are poised to change dramatically.

SKS has started leveraging machine learning and artificial intelligence in certain aspects of its operations. One such application is predicting the saving patterns of its members. Another application is in identifying prudential norms governing transition of customers from group loans to individual loans. Typically, in a microfinance setting, the company lends to a person who is part of the group that takes out a loan. As the person builds up a credit history, the financier becomes more comfortable with giving credit to that individual and allows her to transition to take an individual loan. Loans in this setting are normally collateral free and there is no recourse available to the financier. There is a science behind deciding whether a certain customer in a village is ready to transition to an individual loan, and SKS uses machine-learning techniques for such predictions. Yet another application is in fraud prevention. Monitoring and minimizing the cash carried by loan officers can be done by using real time information on loan payouts, loan recollections, and traffic signals to track the geographic location of loan officers. It is possible to predict frauds occurring in the system by using these data to spot patterns in time. At SKS, these features are at various stages of development, however the future looks promising indeed.

Just as SKS successfully managed to address the trust deficit in microfinance, the banking system needs to fix the colossal mistrust in the system. The creation of trust in any developing country setting in any industry is a collective endeavor. It is not something that is mandated by the regulator, but collectively co-created by everybody in the industry.

Two iconic entrepreneurs, Jack Ma of Alibaba and Sir Fazle Hasan Abed of BRAC Bangladesh, represent two very different approaches to thinking about the creation of trust in financial services. Abed has created trust by working with the country's social fabric. In some ways, this is similar to how SKS and other microfinance firms were built in India. They built on the trust of the group. Every member in the lending group would trust each other and the microfinance firm would trust them in turn. Trust was the core relationship and there was limited technology involved in this.

Abed's approach is different from that of Jack Ma. Ma, a school teacher working in Hangzhou, built Alibaba's Taobao (the online B2C, business-to-consumer, platform) by leveraging technology to create trust. An example of this is the escrow system he established. When buyers pay for something, the money goes into an escrow account until the order has been delivered. Another example is provided by the algorithms that have been built to predict which party is likely to fulfil the commitments entered into in an online transaction. This lowers the risk of transactions not being completed.

SKS followed a combination of these two approaches. It started out purely by leveraging the social relations of the groups in the villages, and increasingly, over time, added layers of technology to buttress things. But the technology is useless without the underlying trust.

These contrasting approaches are a matter of individual choice for the would-be entrepreneur and a function of the contextual environment. Different strokes for different folks! They play out in sector-after-sector. As another quick example, consider the dairy industry and our everyday consumption of milk. We have Amul in India, one of the iconic brands in our country. It is founded on a system of trust, reinforced over decades, since Verghese Kurien, imagined it as a well- governed system of cooperatives. While Amul's plants use the latest technologies, I maintain that, compared to new-fangled approaches I've studied and worked with in China (for example, Huaxia Dairy that developed the WonderMilk brand in eastern China), Amul's model is more a judicious mix of layering technology atop an understanding of social relations at the village level, rather than a pure technology play.[12]

To recap, trust is the foundation for any form of economic activity. There are many aspects to the creation of trust.

1. The first is that arbitrary actions are almost always inimical to the creation of trust. Trust is created through continuity of contact, reliability of contact, so that constructive societal norms are continually reinforced. India's financial markets sometimes face abrupt regulatory changes, de jure or de facto, that vitiate the atmosphere of trust. Contemporary instances of loan waivers for political expediency fall in this category for example.

2. The second aspect is that vigilance in building up the business ecosystem is vital to creating and fostering trust. The ecosystem in any developing country is underdeveloped. Regulators and firms need to consult with each other to jointly create the mechanisms that society needs, they must jointly create the conditions to create. The microfinance industry did not do this adequately and as a result faced a precipitous collapse of trust when confronted with unethical behavior from some parties.

3. The third aspect is that a firm or entrepreneur must work to improve its internal operating processes so as to create an atmosphere of reliability with all, from the customers to the suppliers to the talent in the company. In the microfinance industry, the customers' trust in the firms was enhanced by progressive declines in the interest rate they paid for their loans; it reassured them that the firms could work in the customers' best interest.

Trust is the foundation of any form of commerce, most of all financial transactions. Whether we go back to Buddhist merchants in the first millennium or to Renaissance Italy or to Adam Smith, or indeed to today's technology-mediated transactions, trust remains the essential foundation.

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[12] Tarun Khanna, Nancy Hua Dai and Juan Ma, "Huaxia: Building a U.S.-Style Dairy in China," HBS No. 716-414 (Boston: Harvard Business School Publishing, 2015)