

BASEL COMMITTEE ON BANKING SUPERVISION

Consultative Document

Guidance on the application of the Core principles for effective banking supervision to the regulation and supervision of institutions relevant to financial inclusion

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The Guidance is timely; the Guidance is extremely valuable; the Guidance is very carefully drafted; the Guidance is comprehensive; the Guidance moves us forward very considerably. The following comments are intended to complement the Guidance in various ways, by highlighting topics or nuances which might usefully receive some additional attention of emphasis or by suggesting additional considerations that might have merited inclusion.

1. Assumptions with Regard to Capabilities of the Regulator

The *Guidance* is written as though the Regulator faced no limitations of budget, staff resources, or, indeed, knowledge in executing his task. Yet the reality of almost all countries is that the Regulator does have limited staff and limited pecuniary resources and thus is in many instances unable to fulfil the complete theoretical desiderata of his function.

- *The Limitations of Medium and Small Countries:* The tasks required of the regulator have multiplied to such an extent and the complexity of the job has increased so much that it has become increasingly difficult to accomplish the required tasks with a reasonably sized staff. This is especially true of small jurisdictions (e.g. Pacific Islands, Caribbean countries, small population countries) where the absolute number of competent staff that can be recruited or trained is small. Add to this that medium and small countries also usually have correspondingly small budgets and many other demands on the treasury and the problem is further compounded. Finally, factor in that seniority may be small or non-existent and then even Central Banks are limited in the staffs they can afford to mobilize.

The disproportion between what needs to be accomplished and what the Regulator can do in these jurisdictions is large. Accordingly, it becomes indispensable to devise substantially less expensive modalities of supervision.

- *Staying abreast of the latest (e.g. digital finance):* The task is further complicated when a new and sophisticated technology has to be digested. Now the Medium or Small Country Regulator is faced with a range of novelty to master, which challenges even better-equipped and more technically informed jurisdictions. Even using foreign experts does not fully resolve the problem, since no Regulator can abdicate the responsibility for fully understanding what occurs in their jurisdiction.
- *The challenge of covering the full range of tasks:* There is no excuse for the Regulator not keeping the financial system safe. But he also needs to keep it up to date. There is just no way to do it all, so a system of triage becomes unavoidable. And the saving grace is provided by the risk gradient.
- *Working down the risk gradient:* “Deal with where the greatest risk is first; then go to the next greatest and work your way down.” The problem is several fold: first, risk has a way of popping up where you least expect it, but, second, and perhaps more pernicious, since risk in a financial system is not independent of human behavior, if it becomes known that the Regulator does not monitor a particular part of the financial system, it will surely and quickly become a source of major risk. Human beings, when not watched and held to

a high standard, will slough off, and in a financial system that is a prescription for the worst kind of operational risk, let alone bad loans.

- *The urgent need to save on human resources:* In Medium and Small Jurisdictions, the scarcest resource is capable people. Hence, developing techniques that are skilled labor saving should have a very high priority. Unfortunately, the present trend is to generate ever more supervisory requirements, not to find ways to save on scarce human talent.
- *Keeping the cost of supervision down: how to distribute the levies?* When the cost of supervision is not borne directly by the Central Bank, it is customary to levy a charge on the supervisees. That has the advantage of keeping the cost of supervision out of the legislatively sanctioned. But it also provides a very visible measure of the cost of supervision to the financial system. But then the question immediately arises as to whether all institutions should pay the same proportional levy regardless of whether they are large or small, or whether some other distributive scheme would be more appropriate.

One possibility is to argue for progressive taxation: the large institutions should pay disproportionately more. Another possibility is to argue an externality: inclusion generating institutions, such as microcredit lenders, generate a social good, including legitimacy of the financial system, which benefits the large banks even more than the small ones. A third possibility is to factor in the costs of supervision: now, the small ones will turn out to be more expensive. When resources are scarce, and they almost always are, there is no escaping the need to find an allocation formula that serves the public good. And that is when inclusion and the externality it provides in generating legitimacy for a market economy come into their own.

2. Implications for Supervision

In a context in which resources are scarce and everything desirable cannot be done, it becomes necessary to find ways and means to substantially increase the productivity of supervision, especially when financial inclusion is to receive its due. The *Guidance* is not very helpful on this point.

- *A new balance of extra-situ and in-situ:* The possibility of effectively transferring accounting records across long distances at almost zero cost makes it possible to examine banking records at a central location and with substantial cost savings. This is not to say that the need for on-site inspection of a bank or other financial institute has become completely unnecessary; it has simply become substantially diminished. Authenticity of records still needs to be established and in some cases still requires physical verification. Meetings with Boards and Managers are still essential; otherwise it becomes impossible to verify business strategies and to obtain a first-hand impression of the internal dynamics of the institution. But it is increasingly clear that the purpose of in-situ supervision has already undergone substantial change and will continue to evolve. Extra-situ audits are one important way in which the productivity of supervision can be rapidly increased.

- *Systematically identifying outliers:* The naked eye is at a substantial disadvantage compared to the computer when the issue is to detect outliers, unusual entries or other phenomena that are odd by one or another criterion. For sure, identifying such oddities is only a first step. The next one is to identify their reason for existing. Then, finally, their appropriateness needs to be assessed, applying tried and true standards. In this process, the computer allows the supervision to focus much more effectively on the odd cases and thereby to increase the quality of supervision considerably. Where large numbers of small operations are at issue, there is no real alternative to these newer procedures. Accordingly, maintaining a safe financial system while driving for inclusion absolutely requires such new modalities of supervision.
- *Benchmarking across institutions for micro prudential:* Where a number of financial institutions do substantially the same thing, comparing on a cross-section basis should be a good technique for the Supervisor; no doubt such a technique will be revealing. For sure, each microlender or each meso lender, or even each lender, is different. And that is why benchmarking is necessary, rather than simply using averages. We need stylized facts to confront particular cases with. Then, judgement needs to be applied. But, again, as with the identification of outliers in each particular institution, so comparing across similar institutions is likely to provide some illuminating surprises and signifies raising the efficiency of supervision another notch.
- *Benchmarking across institutions for macro prudential:* in microprudential benchmarking, we look within institutions for similarities; in macroprudential we are looking for similarities in the response of institutions to changes in the macro environment. Since financial inclusion transactions are small and many, statistical regularities are stronger: the central limit theorem applies with greater vigor. Accordingly, differing responses from similar institutions are noteworthy and may well justify a field visit to the institution, or at least a request to its management to stop by the Supervisor's office.
- *A heightened sensitivity to the quality of information:* Much of the productivity gain discussed here depends on reliable data being transferred to the Supervisor. This justifies a high degree of concern on the Supervisor's part regarding the quality of the data and how it is produced. The implications are legion: from the sequence of data entry, to the internal checks in the institution, to the computer routines used for calculations and to how many decimals the approximations are run to, through the human/computer interfaces, where error can be introduced or coefficients can be manipulated. Since items such as small differences in capital requirements leverage to considerable monetary amounts, apparently small reclassifications can translate to significant monetary benefits for clients, and correspondingly offer opportunities for "rent sharing". Reliable data are therefore necessary not only for effective extra-situ supervision but also for honest banking.

3. Assumptions with regard to the capabilities of the Regulated

Just as the capabilities of the Supervisor may be assumed to be unrealistically large, so the capabilities of the supervisees, especially where microlenders are concerned, may be very substantially overestimated. With the result that the financial system will function quite differently from what might be assumed in theory. The *Guidance* would do well to address this issue.

- *Staff*: Smaller institutions have less staff and less well-paid staff. As a result, they have staff that is less capable, is less productive, makes more mistakes, and, ultimately, generates lower profitability. Supervisors need to be cognizant of that fact and not require unrealistic levels of performance.
- *Technology*: Smaller institutions are likely to have less modern and, therefore, less efficient technology, from banking cores through ancillary computer software. In part, this is a consequence of smaller budgets. In part, it is the consequence of a smaller scale which the standard computer programs have outgrown. But in part, it is the counterpart of the less competent staff, one that would not be able to handle more up to date technology.
- *Capacity to Supply Information*: Less capable staff added to less up to date computers can only result in a lower capacity to supply information. However, effective supervision is increasingly based on the receipt of up-to-date and accurate information. It follows that the institutions catering to financial inclusion are at a competitive disadvantage with their peers, with consequences for financial inclusion.

4. Implications for Corporate Governance

The implication of much of the foregoing is that owning or directing a small financial enterprise, and even more a microfinance institution, means that you have to try harder, or you will ultimately be priced out of the market. However, from a Public Policy point of view it is not at all clear that one wishes to have only large financial institutions, hence the Regulator will have an interest in small and specialized institutions surviving. This has implications for whom one wishes to have as owners and as directors of these enterprises. The *Guidance* partially addresses these issues but might go deeper into topics such as those raised below.

- *Shareholders – domestic vs foreign; investors in multiple enterprises*: The desirable characteristics of shareholders, if they are to be partial to financial inclusion, is that they be open to innovation, recognize that competitive salaries more than pay for themselves in higher productivity, and understand the economies of scale and of scope that the industry is subject to. This is a fairly tall order and very many shareholders of financial institutions, especially the smaller ones are not characterized by such qualities. Accordingly, it falls to the Supervisor to help achieve a Board of Directors that will supplement the qualities found lacking in the shareholder.
- *Directors*: On the one hand, we want directors that know something about banking; on the other hand we want directors that know something about microbusiness; and on the third hand, we want directors partial to financial inclusion. The most difficult kind of director to find is one who knows about microcredit and also knows something about banking.

Ordinarily, we would like the stockholders to appoint the directors without any involvement from the Supervisor. However, without such involvement it is unlikely that the Board will have a balance that assures adequate concern for its micro entrepreneurial and small microbusinesses clients.

- *Supervision:* Boards of small financial institutions or of NGOs that have graduated to being supervised institutions, need significantly more supervision than others. But this is likely to turn out to be a good investment, since such institutions are often the ones pushing the boundaries toward less-included populations.

5. Consequences of the “Newness” of Clients

Financial Inclusion by definition means incorporating new clients. But this also means clients less familiar with the customs of financial institutions and clients quite apt to bolt from the system again if they are treated in ways which *they* perceive as not functional to the management of their finances. The *Guidance* could usefully incorporate considerations of the concerns put forth below.

- *Incorporation needs to be progressive and stable:* Financial inclusion is a gradual process in which the new participant little by little acquires confidence, learns to function in a new financial environment and finally ends up feeling that being financially included is the normal state of affairs. It is important to be clear that this process takes time, often occurring over a few years.
- *Diffusion is a gradual process and also requires stability:* Diffusion is the process in which individuals imitate each other's behavior and ultimately reinforce the collective norm that they are implementing. In Financial Inclusion, the individual process and the diffusion process coexist and typically reinforce each other. But, by the same token, the process can unravel and parts or all of the financial system can be rejected as abusive, thieving or worse.
- *The business cycle is damaging to this process:* Changes in the terms of inclusion (interest rates, terms of loans, collateral requirements, etc.), a normal part of the business cycle, are damaging to Financial Inclusion, which depends on conditions being stable. When the business cycle causes changes, the result is a loss of confidence in the system and that produces withdrawal. “Once burned, twice shy” applies in this case. People who have had a bad experience with a bank are unlikely to return quickly.
- *Insulating inclusion against the business cycle is vital for smooth progression:* It follows that ensuring a cumulative progression of Financial Inclusion will be materially helped if the process can be insulated against fluctuations coming from the business cycle or from abrupt policy swings.
- *Regulations covering natural and socio-environmental disasters:* Natural disasters and disputes of a socio-environmental nature will also interrupt the progression of Financial Inclusion. Therefore, it is especially important to develop mechanisms to ensure that the flow of credit will continue even when such undesirable events occur. Consider an earthquake: it is hardly reasonable

to insist that a small grower repay his working capital credit on time if his house has just collapsed. An orderly refinance mechanism, *which does not penalize the debtor for this “act of God,”* needs to be put in place.

- Manmade disruptions may create similar situations. When a dispute erupts over water use for a mine, for example, people may get killed as a result of this dispute and the corresponding province may fall into economic depression: third parties such as bed-and-breakfasts, taxi companies, truckers, all sorts of suppliers, restaurants, hotels, etc. may find their markets have evaporated. They must be helped to an orderly work-out, depending on how long the emergency will last and what kind of alternative sources of income can be developed. But the initial response must be one of buffering, for SME finance and even more, microfinance, have an enormous role to play in spreading out financial risk over time, to facilitate ultimate repayment.
- *Dynamic provisioning is one mechanism – frees up capital:* To enable the financial system to maintain or even increase financial support in the lower half of the income distribution, banks (and others) are substantially helped if loss provisioning is countercyclical. Dynamic provisioning frees up capital to support lending during downturns. On the upswing the dynamic provisions dampen the lending euphoria. For SME finance and microfinance such dynamic provisioning is particularly important, considering the need for stability of finance in these sectors.
- *Preagreed rediscount facilities is another:* Another way to provide liquidity in difficult times to those who should continue to provide credit to new or newish borrowers from the lower half of the income distribution is to establish pre-agreed rediscount facilities at the Central Bank. It should be clear that these are lines that the beneficiary institution should be enabled to draw on at its own discretion. But that, correspondingly, it should be required to demonstrate after the fact that it was truly in liquidity squeeze.
- *Preagreed Repurchase agreements is a third alternative:* A final alternative is to establish pre-agreed repurchase agreements with a state bank or a consortium of private banks. Under such an agreement, a micro lender will sell some of its portfolio to gain temporary liquidity, and will buy it back when times have gotten better. There will, of course, be an interest charged at a rate related to the Central Bank's discount rate.

6. Competitiveness of Microfinance

In the typical economy the large businesses pay low interest rates and the small or microfirms pay high interest rates. This affects the profitability of small and microenterprises. By the same token, since newly included firms are typically small or micro in size, the profitability bar for entry is skewed: small enterprises are required to show much higher profitability to be financeable. The *Guidance* is silent on this issue, yet capacity to raise finance is often crucial for Financial Inclusion. Hence, the revision of the *Guidance* may want to address this topic.

- *The Size Structure of Interest Rates:* Interest rates are typically lower for large loans than small loans, and they are usually highest for consumer loans. The

stylized facts are that large corporate borrowers pay close to world market rates, say 3-5% p.a., mid-size companies without access to world capital markets pay 10-15%, smaller companies pay 22-26%, micro credit pays 35-40% while credit card debt runs 45% and above, and department store credit runs 80-120%.

- *Conventional Explanations for the Size Structure of Interest Rates:* Interest rates for small loans are high because: (a) there are manifest economies of scale in processing loans, (b) gathering the information on small or micro borrowers (who have little in the way of accounting records) is much more costly per loan unit than for larger units (who have balance sheets and similar standardized information); (c) risk is much harder to assess in micro and small lending; (d) risk looks much bigger ex-ante for the individual loan than it is ex-post for a loan portfolio; (e) often micro-business loans are indistinguishable from consumer finance ; (f) the market will easily bear the rate (i.e. a high rate can be charged without running into market resistance).
- *Limitations of the Conventional Explanations:* The conventional explanations tell only part of the story: (a) there is substantial *hysteresis* in the rates; the evidence is that when inflation comes down, the structure of rates does not collapse: the corporate rate comes down, the rest are much more sticky, (b) cost of information is indeed subject to economies of scale, but in the presence of a view that the “market will bear high rates”, the efficiency of the information gathering process leaves much to be desired; indeed the slow diffusion of psychometrics and of “big data” methods indicates little effort in assimilating new methodologies of gathering data, (c) risk on small and micro loans is assessed in subjective and unstandardized ways, which are biased towards overstatement (the cost to the credit officer of understating the risk is high, the cost of overstating it is low), (d) what the “market will bear” is systematically misinterpreted: the fact that high interest is willingly paid is often a disequilibrium phenomenon, small businessmen will reason they are paying a surcharge on the rate until they establish a track record and that the rate will come down in later years. When they find out that they are mistaken and the rate does not come down, it may be too late and they have lost all their capital. But then they are replaced by the next small businessman who makes the same mistake for the next two years, and so forth. The net effect is that the rate stays up, successive micro and small businesses have gone broke and along the way capital has been transferred via high interest payments from SMEs and micro business to banks and other lenders.
- *Consequences of the Size Structure*
 - *Disintermediation:* When the deposit rate is of the order of 3% and the loan rate ranges from 20% to 80%, it clearly pays to invest savings in real assets rather than in the financial system. But this also means that savings will be allocated much less efficiently. The financial system is supposed to provide arbitrage between different savings and investment instruments; in the presence of such spreads, this mechanism cannot operate.

- *Informalization*: The large spread between deposit and lending rates creates opportunities for informal markets to arise, with all the lack of transparency and imperfections connected therewith.
- *Skewed profitability of investments*: Higher interest rates mean shorter time horizons for investments. As a result many agricultural projects that have gestation periods of 3 or 4 years are ruled out. But that excludes many of the profitable crops that characterize industrial export agriculture. Accordingly, small agriculture remains contained to low productivity crops.
- *Weakened monetary policy*: Modern monetary policy operates through an interest rate set by the Central Bank to guide inflationary expectations (“inflation targeting”). Changes in this rate typically are of the order of a quarter or a half percentage point. Related to a corporate interest rate of 4 or 5%, such a change can make a difference. However, related to a 20% or 40% interest rate on a small loan, a quarter or a half percent change become irrelevant. It follows that for the vast majority of enterprises in the economy, monetary policy, as presently constituted, is irrelevant. This is not a healthy situation.
- Alternative options for a progressive convergence.
Financial Inclusion will not have been successfully implemented until such time as the terms at which the big and the small borrow have converged significantly. Here are some innovations that may help getting to this goal.
 - *Origination efficiencies – using psychometrics and big data*: Substantial economies can be achieved in gathering data on potential clients by making use of emerging techniques. Psychometrics has a long history in personnel evaluation, but has only recently been applied to predicting the behavior of borrowers. However, the underlying logic is impeccable: identifiable character traits determine integrity and the willingness to pay; transitory constraints affect the ability to pay. Both can be elicited by properly structured dynamic questionnaires. Compared to present techniques which rely on personal interviews and qualitative assessments of loan officers, psychometric techniques also present the advantage of allowing standardization.
Big data usage applies the central limit theorem to lending: given enough data, the correlation of a good debtor with a number of other indicators is high. One version of this view will argue that people that have Facebook friends that are good debtors will themselves also be good debtors. Such a view is likely to be statistically very robust. But not very relevant to where few people are on Facebook. Yet there are other similar indicators that offer significant chance of realizing economies of origination.
 - *Risk assessment efficiencies*: Pricing customs currently are based on a mix of considerations that reflect costs of origination, cost of information on the customer, a gross assessment of risk and a view of

what the market will bear, with the latter adjusting very slowly to competitive pressures. Within this mix, there is little discrimination according to risk, for the very good reason that in the case of SME and Microcredit lending it is hard to develop effective quantitative criteria to differentiate according to risk. But with the new psychometric and big data techniques this has significantly changed. Accordingly, it is now possible to tailor the interest charged more closely to the objectively measured risk. Significantly lower interest rates should result for a significant subset of borrowers.

- *Back office efficiencies:* Back office operations are notoriously subject to economies of scale. Core banking functions, all accounting, invoicing, procurement, etc., are activities on which major economies can be achieved if mechanisms for pooling are devised. An example might be taken from the German system of *Spaarkassen*. There are more than 250 of these institutions throughout Germany, and they operate with a single standard banking core. The Peruvian system of *Cajas Municipales*, patterned after the German system consists of 11 institutions and they operate with 8 different banking cores. Were they to use a single one, they might be able to achieve centralized processing in a single facility, while certainly keeping their accounts separate (with the requisite Chinese walls). The cost saving could translate directly to lower interest rates.
- *Achieving scale through outsourcing:* Pooling demand can be a means to achieve scale. The simplest means to secure this result is to outsource to a common supplier. If a single country's market is not large enough for this purpose, there is nothing to prevent cross-border outsourcing. Indeed, some multinational banks concentrate much of their data processing in particular locations that have cost advantages. There is nothing to prevent the institutions catering to Financial Inclusion from taking a leaf out of their book.

7. Capital Requirements

Capital adequacy will always be a concern for bank regulators and there will always be a tendency to feel that more is better. But since capital has a cost, overcapitalizing means losing competitiveness. On the other hand, institutions that generate Financial Inclusion need to be efficient, [and](#) therefore need to keep costs down. Hence the tension that capital adequacy generates. The *Guidance* addresses capital requirements, yet might take up more forcefully the various issues raised below, especially on providing automatic stand-by liquidity.

- *Small is beautiful but scale is required:* The problem banking institutions these days are those that are too big, but there is also a problem if banks are too small. There is a minimum scale for financial institutions, banks and others, that allows them to be competitive and also to have sufficient diversification in clientele and loans to be sustainable. The question is how to identify that minimum and build a buffer around it for contingencies.

- *Capital vs Liquidity:* Capital in a financial institution should be sufficient to cover the losses that will be made during startup and also those that might be incurred if unexpected turbulence is encountered during operations. However, a distinction needs to be made between capital and liquidity, for the latter is required to cover realized outflows from operating losses as well as redemptions of deposits. At the same time, liquidity can in certain circumstances substitute for capital, as when credit lines are available. Then, temporary losses or temporary withdrawals can be financed by having recourse to liquid resources, even if they generate debt, because reversals of such flows are expected in the near future.
- *Niche operators – upgraded NGOs:* As Financial Inclusion gathers steam, there are increasing opportunities for niche operators to enter the regulated financial system, especially upgraded NGOs. Such institutions have specialized knowledge of certain segments of the market which allows them to provide good quality service. At the same time, their specialized knowledge allows them to keep the relevant risks under control. A policy favoring financial inclusion will be open to such specialized institutions and authorize them with lower capitalization than would otherwise be required.
- *Digital finance opens opportunities for more niche operators:* Digital finance is a specialized function and thus opens the opportunity for new operators to find niches in this specialized market or to stake out territory due to specialized knowledge pertinent to this market segment. In both of these cases, competition is heightened and should benefit existing consumers as well as potential recruits to financial inclusion. Accordingly, financial inclusion concerns will constitute reasons to encourage the entry of such niche operators.
- *Minimum capital requirements: debt vs equity:* How deep the pockets of the shareholders of a financial institution should be depends in part on how easy it would be to raise additional funds, either debt or equity, if an urgent need was to appear. In part this depends how developed the financial market is, in part it will depend on whether only a particular institution is in need of raising money or whether there is a systems-wide crisis and in part it will depend on the how forthcoming the lender of last resort might be. In jurisdictions with rather undeveloped capital markets, it is unreasonable to assume that additional funds can be raised easily if and when a general crisis breaks out. In addition, it was pointed out earlier that it is desirable to insulate the newly financially included in so far as possible from negative effects of the cycle. All of this speaks to higher rather than lower levels of capitalization. However, since this implies higher costs (and therefore also higher interest rates), it is desirable to develop other sources of liquidity that could reduce the need for “hard” capital.
- *Stand-by facilities to ensure survival of the niche operators:* given the importance of niche operators for Financial Inclusion it is worth generating stand-by facilities that reduce the capital requirements for such operators. Such stand-by facilities would ideally be provided by the Central Bank, but can

also be provided by one or more state banks, or even by one or more private institutions. However, the most appropriate agency for such facilities is the lender of last resort.

8. Overindebtedness: Households

Excess household debt is an ever present worry for the Regulator. Also a favorite topic for the newspapers to write about. In economies with some degree of informality, however, the extent of overindebtedness is very hard to determine. Where new entrants into the world of formal finance are concerned, the issues of measurement loom even larger. And, of course, it is desirable for new entrants to acquire debt to the formal rather than the informal financial system. The *Guidance* may wish to be more explicit on the measurement complications raised below; they are germane to a wide range of real world situations.

- *Definition of over-indebtedness:* A household has too much debt when the ratio of what it owes exceeds some (arbitrary) percentage of its monthly income. What level of debt is healthy depends on a variety of factors, including whether repayment terms are flexible, whether it is revolving or fixed term, and whether it is in the same currency as the household's income.
- *Identifying the debt: ambiguities in the presence of informality:* Consider a household that has one member with a formal job (say, a teacher) and three members in informal occupations. Now, the teacher borrows from the State Bank to repay a money lender to whom another member of the family has a debt. Under such circumstances, there is no increase in true debt, yet the family's recorded debt will go up. We can only measure what is in the formal sector, unless, of course, there is voluntary disclosure. Hence, the reliability of information on the level of existing debt is shaky at best.
- *Identifying the relevant income base: economic perimeter of the borrower:* Our prototypical school teacher is the borrower of record, but is the relevant income base only his income? Clearly not if there are other income earners. It follows, therefore, that it is indispensable to identify the economic perimeter of the borrower, i.e. the incomes that are available to sustain repayment of the debt. Within that perimeter will coexist formal as well as informal incomes, declared as well as undeclared incomes. Given this situation, the indebtedness ratios as conventionally calculated will almost always be overstated, in some cases even egregiously so.
- *Partial solutions:* The debts, at least to the financial system, are usually known. The challenge, therefore, is to obtain a more reliable estimate of the relevant income base. Here, in many cases, the financial institutions themselves will have considerably more information than the Supervisor. The reason is this: when applying for a loan, the borrower is normally asked the purpose of the loan and how he/she plans to repay it. The answer discloses informal income and additional family income. However, when more than one lender is involved, very often information on the same borrower differs between institutions. There is the choice then of taking the average, the highest declared income, the lowest, or some other fraction. In any case, however,

using loan application information makes it possible to significantly improve the debt ratio information. By the same token, a more reliable indicator of over-indebtedness can be calculated and better guidelines developed for extending additional credit to consumers, including those who are newly included clients of the financial system.

9. Overindebtedness: Microenterprises

Overindebtedness of microenterprises should be as much a concern for Regulators as overindebtedness of consumers, yet it receives scant methodological attention. However, benign neglect is not a good way to treat any kind of overindebtedness. It is therefore suggested that the *Guidance* provide more visibility to this topic, in order to encourage Regulators to deal with it preventively. Some suggestions for how to incorporate this topic are provided below.

- *A matter of definition: where does the household end and the business start?* In an economy where 50 to 75% of the workforce are informals, where the household ends and the business starts is often hard to define. Take the street vendor who finances his inventory by charging the food he buys on his “consumer” credit card. Should he be protected as a consumer, or is he a business masquerading as a consumer and should therefore be left to his own devices when a bank overcharges him? And, when, one time, he charges his inventory directly on his credit card, should he then be treated differently? The only reasonable distinction is between those individuals who by themselves have countervailing power vis-a-vis the financial system and those who need the Supervisor to right the relative scale of bargaining strength. But this draws the line in a quite different place from where conventional consumer protection laws do. It would appear that some adjustment to reality is appropriate here.
- *The progression of lenders accessing a newly bankarized client:* Once a new client is bankarized and has developed a payment record, which make take 6 months to a year, the competitors of the institution first bankarizing him/her will try to lure him/her away with competitive offers. This generates a free rider problem and erodes the incentive to bankarize in the first place.
- *Healthy evolution: refinancing at lower rates:* The dynamic of competition for newly bankarized clients has a positive side too. New borrowers, with a good reputation, can bargain their way down the interest rate ladder, refinancing again and again at lower rates.
- *Unhealthy evolution: piling up debt:* As the newly bankarized receive additional offers of loans, the temptation to take up those loans becomes irresistible, and soon there is debt, not to one but to five lenders. Then the debts become impossible to repay. But formal indebtedness is rigid about repayment terms and not paying has consequences. Before long, a fraction of the newly bankarized have acquired a dismal credit history. Depending on the quality and comprehensiveness of coverage of the credit bureaus, curing a bad credit history may be difficult indeed.
- *Options:*

- i. *Protect the bankarizer*: The bankarizing institution could receive the equivalent of a patent protection for its bankarization activity if the newly bankarized only appeared in the credit registry with a lag, say of a year or 18 months. Then, it would not be possible for non-bankarizers to have a free ride and cherry pick the best newly bankarized customers. Whether such a lag is legal or not depends on each jurisdiction's transparency laws and equal access laws.
- ii. *Increase the required capital base for the nth loan to the same individual*: The evidence is ample to the effect that when a debtor has three or more creditors he is less likely to pay any of them than when he only owes to one or two. Thus, there are grounds for believing that the nth loan to the same debtor needs to require a greater capital base than the n-1th loan: the nth loan is simply more risky. But such greater capital requirement will then discourage the nth loan from being made, which is precisely the desired outcome.

10. Consumer Protection

This aspect of bank regulation is increasingly coming into its own, even though there are many jurisdictions in which consumer protection is not vested in the bank supervisory agency. The *Guidance* certainly recognizes the importance of this topic, yet does not seem to reflect the reality on the ground, where a large part of the economy consists of informal firms or microenterprises barely distinguishable from households. Some of the consequences of this reality are presented in what follows.

- *Who to protect – the countervailing power criterion*: Consumer protection is required because there is a fundamental asymmetry in bargaining power between a single consumer and a large bank or other financial institution. Moreover, most contracts with a financial institution that a consumer is likely to encounter are non-negotiable; you either sign on the dotted line or not. What is more, most such contracts are very similar across institutions. Therefore, the consumer has virtually no power to negotiate the terms of access to financial institutions. It is delegated to the Supervisor, Competition Authority or the Consumer Protection Authority to step in and defend the consumer and reestablish some level of balance between the parties.
- *Who to protect – the pass-through criterion*: Businesses do not enjoy consumer protection; businesses are assumed to be able to protect themselves, perhaps even to have adequate countervailing power. This is certainly true for the large corporation: it can make the banks and other institutions compete for its business. But it is not true for the SME and even less so for the micro enterprise. These size businesses are as much at the mercy of the large financial institutions as are the consumers. However, there is one major difference between a business and a consumer: the business can pass on its costs to the consumer. While this is often questioned when markets are competitive, it is still true that when *all firms* in a market face similar cost conditions, say a high interest rate, *then* it becomes possible to pass it on. So, the reasoning goes, businesses do not need consumer

protection because they can defend themselves by passing financial costs on. So far so good. But what happens then to the hapless consumer that is the recipient of the “passed on” financial cost? If that cost had come directly to the consumer, he would have received “consumer protection” on it. But since it arrives indirectly, there is no such protection. This would appear to generate enough of a differential treatment to merit reconsideration.

- *Transparency as the joint requirement of prudential regulation and consumer protection:* Good prudential regulation requires understanding what the regulated institution’s business model is in order to assess its prospects for stability and growth, as well as the externalities it may be generating for the system as a whole. This requires transparency of the operation to the Supervisor. On the other hand, consumer protection requires the financial institutions to disclose all charges levied on consumers. That is the essence of transparency in consumer servicing. The overlap is clear: transparency is a requirement of prudential supervision as much as it is a component of consumer protection.
- *Legitimacy as a requirement for safe banking:* Bankers are traditionally viewed as enemies of simple people. This makes “anti-banker” measures politically attractive and various kinds of demagogues and populists have fashioned careers out of attacking banks and bankers. Accordingly the *legitimacy* of the banking system is an integral part of its safety. The more legitimate the financial system is felt to be, the less it will be subject to the kind of political persecution that could undermine it. But legitimacy has a price: the public must perceive that it is treated fairly, that fees are reasonable and that complaints are fairly and expeditiously tended to.
- *Minimal requirement for consumer protection --- uniform terminology, simple language, short forms (no legalese!):* The requirements for financial system interaction with the public are easy to state but very hard to implement: terminology should be uniform, contracts and rules should be in simple, easy to understand, language, and forms should be short, limited to the essentials. Legalese should be completely absent. Lawyers believe that such a situation would quickly become untenable, because mutual rights would not be defined clearly enough to keep litigation from mushrooming. Short and simple forms and procedures have certainly been adopted for simplified accounts, for micro insurance and for electronic banking. This has been acceptable because the size of transactions, and therefore the risk (including that of litigation), have been small. But as experience with these simplifications accumulates, it may well become possible to gradually raise the thresholds and incorporate ever more and larger, even midsize, transactions into the world of simplified transactions.

11. The Special Challenge of Electronic Money and Related Innovations

The Digital Finance Revolution is the greatest technological change that has happened to payments systems since the invention of paper money. Not surprisingly, it will

impact financial inclusion in a most positive way. The *Guidance* might fruitfully collect in a single place all the recommendations that Regulators would be well advised to bear in mind in this connection. This would require organizing by the topics relevant to Digital Finance and cross-referencing the relevant principles, rather than the other way around, something that would save many Regulators a lot of time. Here are some of the areas where the *Guidance* will have especially much to say.

- *Know Your Customer*: This is a core traditional requirement of banking. Yet with electronic money the expectation is that the banker will never actually see his client. Fortunately, seeing the client face to face is really unnecessary: there are plenty of ways of ascertaining identity starting with national identification systems and ending in passwords and feedback mechanisms of various sorts. But above all, here is where proportionality of requirements to risk incurred should come in. For transactions below a certain threshold, a minimal identification should be sufficient. As the size of the operation (or its complexity) increase, so should the identification requirement. The risk of money laundering via small operations (“smurfing”) should not be an obstacle here. Such practices are easily detected (and defeated) by simple computer diagnostic programs. Even more important, they are highly inefficient as means for large scale money laundering.
- *Interoperability & Interconnectivity*: The ideal is clearly a seamless system of electronic money in which any user can access another one regardless of which telco or which banking institution they are each affiliated with. In many jurisdictions, however, one or more competitors have installed their systems and the challenge now is how to fuse them into a coherent whole. The business interest for doing so will be based on the very large economies of scale that can be harvested when coalescing, but the countervailing considerations will be those of attempting to beat out the competition. The Regulator then has the very challenging task of finding an effective path that will lead to just enough collaboration to harvest the economies of scale, while encouraging competition in other areas, where it may be required to keep costs and prices down while encouraging innovation in value added products. Since the starting point in each jurisdiction will be different, yet the goal is the same, it follows that there will be many paths leading to that goal and country differences can come into their own. What is more, some will be definitely more efficient or more feasible than others.
- *Costs & Economies of Scale - International Overlap?* What should a country do if its overall size is too small to operate a digital finance system on an efficient scale? One answer is simply to live with the consequences: its financial system will be high cost and that will ultimately be reflected in its real exchange rate and real factor remunerations (of both labor and capital). However, there is also another possibility: neighboring countries could band together and share a single digital finance system. If they also shared a currency and a Regulator, such as in francophone West Africa, it might actually be quite feasible to implement such a unified and unifying system. Where such a felicitous situation does not exist, the multicountry solution would have to be different and somewhat more complex but should not be impossible. What is certain, however, is that some new paragraphs need to be added to the *Guidance* to cover this possibility.

12. Conclusion

This commentary on the *Guidance* has raised a number of issues and topics that this author believes would further enrich the existing text. Some, the authors of the *Guidance* will want to accept and incorporate, others they may feel less enthusiastic about. What is surely true, however, is that Financial Inclusion will continue to advance and that it will be necessary to increasingly incorporate this evolution into the mainstream of financial regulation. Accordingly, we will no doubt be seeing updated versions of the *Guidance* once every so often.