



## Measures of financial inclusion - a central bank perspective

Blaise Gadanecz and Bruno Tissot\*
Bank for International Settlements, Basel, Switzerland – Bruno.Tissot@bis.org

### **Abstract**

Central banks' experience shows that better statistics can be instrumental to promote financial inclusion. Well-founded data frameworks are essential when developing financial services for the poor, in both formal and informal markets, and adequate indicators are a precondition for good policies. They ensure that financial inclusion is properly assessed and that measures aimed at developing it are adequately implemented, monitored and adjusted as required. Good statistics can also help to strike a proper balance between encouraging innovation and the growth of financial services on the one hand, and ensuring that financial stability is preserved on the other.

**Keywords:** financial services, financial stability, poverty, data measurement, public policy.

**JEL classification**: E58, G18, G21, I22, I30, O16

#### 1. Introduction

Financial inclusion, broadly defined as access to financial services, is expanding globally but remains a key issue for policymakers worldwide. In particular, it is an important public policy goal that directly relates to central banks' key objectives and activities (Mehrotra and Yetman (2015)). Financial inclusion can contribute to sustaining economic welfare and to reducing poverty. It also supports economic, monetary and financial stability, by making saving and investment decisions more efficient, enhancing the transmission of monetary policy and facilitating the functioning of the economy. The international standard-setting bodies (SSBs), especially those hosted by the BIS, have been actively engaged with financial inclusion policies for more than a decade. From a payments perspective, the current focus is on facilitating financial inclusion and access through payment systems (CPMI (2016)). From a supervisory perspective, initial attention was devoted to the microfinance activities of banks and other deposit-taking institutions. Since then, the focus has also shifted to the full range of financial products and services that low-income households should be able access (BCBS (2015)).

A key issue for central banks is the need for monitoring the impact of financial inclusion policies. Adequate indicators are a prerequisite for properly assessing the access to financial services, and for formulating, implementing and monitoring public policy designed to enhance it. Good statistics can also help to strike a balance between encouraging innovation and the growth of financial services on the one hand, and ensuring that financial stability is preserved on the other. A number of international initiatives, undertaken by various public and private sector organisations and SSBs, have helped to set up common frameworks for developing financial inclusion indicators and informing policymakers. But despite many and encouraging improvements, measurement of financial inclusion remains work in progress.

For its part, the Irving Fisher Committee on Central Bank Statistics (IFC) surveyed its member central banks on financial inclusion end-2015 (IFC (2016)). The survey covered 47 countries, of which 30 emerging economies. Specifically, the objective of the survey was to compare financial inclusion policies and practices along four dimensions: definitions; central bank mandates, policies and governance; data types and sources; contributions to international initiatives and global forums.

# 2. Definitions of financial inclusion





Official definitions of financial inclusion are neither widespread nor harmonised across countries. A large majority of reporting central banks do not rely on an official definition. And when there is actually such a definition, in most cases it refers to *access to financial services*. Access mainly relates to the ability of firms and households to use financial products and services, given in particular the constraints of time and distance. Relevant measures include the proximity of access points, the variety of access channels, as well as socio-economic barriers limiting such use. In a broader sense, the pricing and other terms and conditions of financial products and services can also be relevant factors limiting the scope for access to financial services for segregated groups. Another widely used dimension is the effective use of financial products and services, eg whether deposit accounts, payment services, microcredit schemes and insurance products are actually used by the population. Measuring this concept is done by looking at the observed consumption of financial products, their usage patterns and customer behaviour.

Most approaches consider both *supply and quality indicators*. Supply (or availability) of financial products and services relates to the various types of such products and services offered to potential customers. For instance, one will focus on the limited number and type of savings products, credit, payment and insurance services offered by various providers to financially excluded groups. Pricing and other terms and conditions can also be captured to complete this assessment, in particular to ascertain whether the targeted populations can afford the products on offer. Also monitored are the various on the supply of financial products and services, which may include administrative/regulatory prescriptions, a lack of interest on the part of providers in serving certain customer segments, business models, unaffordable costs and inadequate product design. Appropriateness and suitability to users' needs are also an important aspect of the quality dimension of financial services. Various concepts can be mobilised in this perspective, such as the pricing of products (is it commensurate with risk?), their convenience and security, the quality of customer relationship management and the degree of consumer protection. Other dimensions also viewed as important relate to financial literacy – which encompasses people's knowledge about financial concepts, inflation and investment risk, their financial numeracy and behaviour regarding money management and savings, as well as their awareness of financial products and services – and the SME financing dimension of financial inclusion related to small and medium-sized enterprises (SMEs).

In contrast, the dimension of *financial infrastructure* is more rarely taken into consideration. This dimension relates to the various elements that support the functioning of the financial system. For instance, robust, safe, efficient and widely accessible information and communication technology infrastructure is a key factor underpinning the provision of transaction account services and broader financial products (CPMI (2016)). The quality of infrastructure can be determined by various logistical, geographical, political and environmental, as well as legal factors. Logistical factors would cover technical reliability, such as the error rate on executing payment orders, and how failed orders are handled or corrected. Geographical, environmental and political factors can also play an important role: for instance, national policies regarding regional autonomy may determine the extent to which far-flung regions of a country are within easy reach of telecommunications or other infrastructure networks. Last, the legal aspects of financial infrastructure relate to the ease with which financial claims can be enforced in court. In the area of payment services, a sound legal infrastructure should include a user-friendly and effective recourse and dispute resolution mechanism to address consumer claims and complaints.

# 3. Central bank mandates, governance structures, contributions and objectives in the area of financial inclusion

Accountability is a key element for consideration in the area of financial inclusion, especially as regards the conduct of related public policies (Gadanecz and Tissot (2015)). Indeed, most central banks perform some direct or indirect reporting of their financial inclusion activities. Another important governance aspect is the organisation of the central bank financial inclusion function itself. Activities related to





financial inclusion are often decentralised, ie several departments and units deal with different aspects of it. Nevertheless, authorities try to ensure a certain degree of policy consistency even when various units are involved. Some countries have set up some sort of collegial structure, eg a formal committee in charge of financial inclusion issues located within the central bank, or a committee comprising representatives of the central bank and other institutions interested in financial inclusion. Not only can such a collegial structure serve as a useful coordination vehicle among the different internal entities working on financial inclusion; it can also help to provide the necessary impetus and buy-in from various stakeholders, including central banks' senior management.

More than half of the central banks surveyed have some sort of *mandate to focus on financial inclusion*. For those countries where there is no explicit national financial inclusion strategy, it is general felt that there is a need to have one. Nevertheless, in practice central banks can intervene at various levels of the financial inclusion policy agenda. They can in particular directly contribute to it in three major ways:

- (i) by *promoting financial education*: monetary authorities have often a mandate to promote financial education and literacy as well as consumer protection. They can, for instance, achieve this by publishing financial literacy standards, together with clear information that serves to protect consumers of financial services. That, in itself, is a key element for supporting financial inclusion. As individuals increase their financial literacy, they gain knowledge of the benefits of adopting transaction accounts, using those accounts effectively for payments and storing value, and for accessing other financial services;
- (ii) by *acting as financial supervisors* and overseers: central banks are often involved in the supervision and oversight of financial services, products, institutions and/or payment systems. This supervisory role can contribute to financial inclusion to a great extent, notably by fostering a clear framework for delivering financial services and ensuring sound market practices. On example is the mobile payments system in Kenya, which can serve as a gateway to other financial services and enhance financial inclusion. Yet another illustration is the promotion by a number of central banks of innovative payment and remittance mechanisms; this is often seen as instrumental in facilitating access to, and reducing the costs of, payment and settlement services; and
- (iii) by supporting ad hoc *initiatives targeted at financially excluded population segments*: some central banks are themselves actively involved in facilitating the delivery of financial services to the population. For instance, they promote microfinance programmes and/or help provide subsidised funding to commercial banks to support their lending to priority borrower groups. Such activities are usually conducted with a view to fostering economic growth and reducing poverty more generally; they also contribute to reducing inequalities in accessing financial services as well.

In a more indirect way, a large part central banks see their *financial stability role* as their most important contribution to financial inclusion. This role often requires central banks to work on promoting sound and efficient payment systems, improving the functioning of the financial system and protecting consumers and users of financial services. Indeed, central bank efforts to safeguard financial stability can potentially contribute significantly to financial inclusion. A smoothly functioning, efficient and stable financial system is likelier to engage with financially excluded households or firms than a system where financial instability or stress prevails. Likewise, financially excluded parties are likelier to access formal financial services when a minimum level of consumer protection is offered. In turn, a higher level of financial inclusion is beneficial not only for those directly affected, but also for the national payments infrastructure, financial system and ultimately, the economy (CPMI (2016)). Thus, a virtuous circle can be created.

Certainly, a dilemma may exist between financial inclusion and financial stability (Khan (2011). One view is that greater financial inclusion enhances financial stability, for instance, by offering banks





a means of diversifying their loan portfolios, or providing them with a more stable source of funding. Another, opposite view, is that improving financial inclusion can be detrimental for financial stability if, say, expanding the pool of borrowers lowers lending standards. This dilemma figures prominently on the current work agenda of international SSBs. Interestingly, the 2015 IFC survey suggested that central banks see little or no conflict at all in reconciling their "traditional" policy objectives on the one hand, and the promotion of financial inclusion on the other.

One important factor facilitating financial inclusion is the *traditional monetary stability objective* of central banks. Price stability is seen as instrumental in anchoring inflation expectations, in turn allowing individuals to make better-informed saving and investment decisions. As such, this is likely to make households and SMEs avail themselves of financial services to a greater extent than they would otherwise do, alleviating financial exclusion. In turn, monetary policy tools can become more effective. For instance, when the saving, spending and investment decisions of households and firms are influenced by banks' interest rates, policy rates can be transmitted more broadly to the economy.

In working towards improving financial inclusion, what are central banks' operational objectives? Interestingly, their primary focus is on improving financial literacy, together with the broad demandand supply-side aspects of financial inclusion. Another important area for action is promoting the quality of financial services (appropriateness to customers' needs). They can do so by ensuring the effective use of available financial services, and implementing proportionate risk-based regulation (Muhammad (2015)). This objective aims to calibrate the intensity of regulation to the risk profile and systemic importance of the products, services, channels and/or institutions being regulated and supervised (see BCBS (2015)). The idea is to refine the regulatory approach so as to address the wide spectrum of institutions being supervised – say, by treating large internationally active banks differently from the small, non-complex deposit-taking institutions that are key to supporting financial inclusion.

# 4. How well do currently available data allow financial inclusion to be measured?

Data on financial inclusion are already widely collected (Tissot (2015)). In the vast majority of countries that collect such statistics, the central bank or the monetary authority is primarily responsible for this task. Data can also come from other sources, such as the supervisory authority, the statistical office, various ministries, or private organisations such as the Bill & Melinda Gates Foundation. Not surprisingly, the most widely available data are supply side indicators (eg availability and access to financial services), which are relatively well covered. Most of these data come from administrative, regulatory and supervisory sources. Typically, as part of their oversight mandates, central banks and supervisory authorities have access to information on financial institutions' supply of services to specific segments of the population. As overseers or operators of national payment systems, they often also have payment data at their disposal. Turning to the demand and use of financial services, data are significantly less available, with surveys being the main data source. In this context, the main shortcoming is that the quality of micro data to assess the number of account holders is often compromised by double-counting. Indeed, it is common practice to count the number of accounts, rather than the number of (different) account holders. Moreover, the cost of demand-side surveys is often high, and response rates and/or response incentives can be low.

As regards the main data gaps, information is often insufficiently available to assess the implementation of financial inclusion policies, in particular to measure the related welfare benefits. Existing data collection frameworks are rarely designed to directly assess whether policy targets in the area of financial inclusion are being met. Data are also scarce regarding the quality of financial services and of financial infrastructure. In any case, the availability of financial inclusion data differs for various segments of financial services and products. In general, the activities of commercial banks as suppliers of financial services are relatively well covered. Perhaps more surprisingly, supply-side indicators related to state-owned banks, specialised financial institutions and even more so post offices are





significantly less available. Turning to alternative financial providers such as non-bank financial intermediaries, cooperative and charitable organisations, lending and savings associations and bureaux de change, information is even scarcer. Last, little indicators appear available on the supply of financial services by telecom firms. Existing data collection systems may have difficulties in capturing new non-bank financial intermediaries or to cope with alternative new data sources (eg big data) that are becoming available to measure financial inclusion.

A large number of central banks produce regional or sectoral aggregated indicators of financial inclusion. There has been a public debate about whether countries should produce specific indices synthesising the various dimensions of financial inclusion, such as access and usage. Such indices do have analytical merits, for instance by providing a useful way of synthesising various aspects of the topic for analytical purposes. A single indicator capable of charting general trends and facilitating comparison between geographic units can prove very useful for mapping policy progress in the area of financial inclusion for identifying advances and/or barriers. In some countries, a synthetic index may be used in the context of the national strategy for financial inclusion.

Despite the advantages of financial inclusion indices, the views are mixed. While several aspects of financial inclusion (availability, access, usage) are usually incorporated into these indices, important dimensions are often missing: eg data on the quality of services, SME financing, financial literacy and the financial infrastructure are often lacking. Moreover, indices can appear to be less meaningful than a dashboard of individual indicators, which may in addition be easier to communicate to the public than a composite index. Last, indices may also suffer from poor cross-country and temporal comparability.

A last important point is that financial inclusion data collection process is generally not sufficiently integrated with national statistical frameworks. Perhaps more worryingly, the various indicators are typically not collected by a single independent authority. Not having data collated in one place may be a corollary of the decentralised fashion in which most countries conduct financial inclusion work. But this may result in inefficient or incomplete data access and could limit the scope of any analytical work. This puts a premium on adequate data-sharing arrangements within countries. Other data collection challenges pertain to the cost and non-response aspects of demand-side surveys. Often, the survey population has insufficient incentives to respond, and data may suffer from double-counting. Conducting a cost-benefit analysis before launching such surveys was thus seen as important. Turning to supply side data, they fail to adequately cover alternative providers.

Concerning the data, there are insufficient data available to assess the implementation of financial inclusion policies. This is compounded by the fact that the data collection framework is very rarely designed to assess whether policy targets in the area of financial inclusion are being met. In other words, more attention could be paid to the need to adequately measure the effects of measures or policies implemented to develop financial inclusion, and their impact on general welfare.

The lack of granularity, low frequency and – to a lesser extent – confidentiality restrictions are additional difficulties. As regards granularity, having more breakdowns of the data is an important objective, as it would allow central banks to conduct more detailed regional analysis and to better measure correlations between the various dimensions of financial inclusion. Meanwhile, financial inclusion data are often collected too infrequently to allow policymakers to make an adequate and timely assessment of the impact of their actions. Turning to the issue of confidentiality, it is particularly important to be able to guarantee to households and firms that respond to demand-side surveys that their answers will be protected and that surveying authorities will strictly adhere to their commitments. Confidentiality issues may also arise for the suppliers of services to the financially excluded, when their (restricted) supervisory data are mobilised for financial inclusion policies.

## 5. International collaboration





The general view is hat important benefits can be derived from collaboration with international groupings in the area of financial inclusion. A significant part of central banks already contribute to international data collection frameworks and initiatives, such as those of the World Bank (Global Findex Initiative), the OECD (International Network on Financial Education), the IMF (Financial Access Survey), the Alliance for Financial Inclusion, the Global Partnership for Financial Inclusion and the Consultative Group to Assist the Poor. In addition, they often participate in the financial inclusion-related activities of regional organisations.

The benefits of engaging with these international forums can be manifold. They include access to other countries' or cross-country data; sharing experience in developing related methodologies, concepts and survey questionnaires; forming partnerships; as well as benefiting from capacity-building and technical assistance in the area of financial inclusion. International collaboration also provides exposure to benchmarks of best practices. Another is that sharing data on financial inclusion brings clear benefits. When data is shared between different authorities of the same country, it can be leveraged to conduct financial inclusion policies, especially when those policies are a coordinated effort between different administrations. International data-sharing also allows the full benefits of international collaboration on financial inclusion to be reaped. In addition, internationally harmonised data on financial inclusion can be a key input for national policymakers when they benchmark themselves on assessing financial inclusion as well as on developing, designing, implementing and reviewing policies to improve it. Last, harmonised cross-county data are essential to conduct meaningful analyses and to support global public and private organisations working on financial inclusion to better target their resources geographically.

However, a general view is that definitions and measures of financial inclusion are currently not well enough harmonised to allow such effective cross-country comparisons. Coming up with a uniform set of indicators across countries for the various dimensions of financial inclusion is thus a key challenge. Yet, each country's experience with financial inclusion is determined by its own domestic circumstances. These include the level of economic development, the specificities of its financial system, the relative importance of the agricultural, manufacturing and service sectors that are the mainstays of the economy, economic inequalities, as well as social, demographic and cultural factors. In this sense, there can be no "one size fits all" measure to gauge financial inclusion universally. In particular, the nature of financial exclusion issues faced by advanced economies may significantly differ from those experienced by emerging markets.

To be sure, there is a clear trade-off between international data harmonisation and the need to adequately capture local characteristics. The implication is that further harmonisation of definitions and measures of financial inclusion is warranted but should not happen at the expense of accounting for national specificities. Dealing with this trade-off is certainly no easy task. One way forward is to leverage existing international collaboration efforts as a good way to further coordinate the development of financial inclusion measures that are both comparable internationally and meaningful domestically. Of particular relevance is the work of the Alliance for Financial Inclusion, the Global Partnership for Financial Inclusion, the OECD/INFE project and the World Bank's Findex initiative. Central banks also see a need to deepen international outreach, technical assistance, knowledge-sharing, financial support and capacity-building; this puts a premium on the work of international forums in general, and of the IFC in particular. In any case, and as acknowledged by the G20, international collaboration can serve as a useful impetus for the advancement of policy for financial inclusion.

## 6. Conclusions

The IFC 2015 survey highlighted six key messages related to financial inclusion policies and practices:





- (1) Definitions. There is no standard, universally accepted definition of financial inclusion. Central banks that do not currently use an official definition of financial inclusion should consider the merits and drawbacks of having one.
- (2) Central bank contributions. Most central banks have some form of direct or indirect remit to promote financial inclusion. But first and foremost, they make indirect contributions to financial inclusion by pursuing their traditional objectives of price and financial stability. The central bank community could thus clarify and communicate more on their contributions to improving financial inclusion by pursuing their traditional policy objectives and should consider the pros and cons of having an explicit financial inclusion mandate from this perspective.
- (3) Internal coordination. Although most central banks report formally or informally on their activities in the area of financial inclusion, operations in this domain are often decentralised. Central banks should address logistical and organisational challenges to enhance the internal coordination of financial inclusion work. This effort should cover the various functional areas in charge of monitoring and implementing financial inclusion policies, and in particular also data-gathering and analysis. Adequate governance structures may have to be put in place, especially when units are involved both within and outside the central bank.
- (4) Data collection. Although data on financial inclusion are widely collected, significant gaps still exist. Work to improve data availability in the following areas would be desirable: (i) data on access, usage and quality of financial services and of financial infrastructure, on SME financing and on non-bank financial service providers; and (ii) data that allow policy implementation to be directly assessed.
- (5) International cooperation. Collaboration between central banks and interaction with international groupings should be further enhanced, especially in order to favour an effective exchange of views and best practices when defining, measuring and analysing financial inclusion.
- (6) International data-sharing. Ongoing efforts to internationally harmonise definitions and measurements relating to financial inclusion should be encouraged, not least to facilitate data-sharing. However, greater harmonisation should leave room for capturing country specificities and should primarily leverage existing international collaboration initiatives.

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