

Towards a more **RESILIENT GLOBAL ECONOMY**

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Executive Summary of Proceedings

G20 conference organised by the

Contents

)	Introduction	page 3
)	Structure of the Conference	page 4
)	Work stream 1: Public Debt	page 5
)	Work stream 2: Private Debt	page 8
)	Work stream 3: The Real Economy	page 11
)	Work stream 4: Taxes	page 14
)	Work stream 5: Capital Flows	page 18
)	Work stream 6: The Global Financial Architecture	page 21
)	Concluding Panel	page 23





Introduction

Growth is finally starting to accelerate as the global economy enters 2017. But this should not be seen as grounds for complacency. Both the Hangzhou Action Plan and the agreement on an Enhanced Structural Reform Agenda will continue to be relevant throughout the German presidency to ensure that substantive progress is made and longer-term commitments are followed through. The revival of 'animal spirits', which some detect, should not diminish efforts to rebalance economies towards more sustainable growth models, but also to make further progress in implementing structural reforms.

High public- and private-debt levels and continuing very low monetary policy rates in some countries weaken resilience, i.e. our ability to prevent, mitigate and recover from economic and financial crises.

One of the recurring themes of this conference was thus that policy buffers that were critical in fighting the global financial crisis need to be rebuilt. This is an essential step towards fostering resilience in the medium-term and thus towards preparing for future crises. Likewise, tailored structural reforms remain crucial to stimulate growth and to make our economies more dynamic and innovative, putting them on a sustainable growth path. This in turn fosters resilience to shocks and helps address long-term challenges. In sum, it is vital that more is done to enhance resilience in the future.

The first aim of the conference therefore was to highlight the issue of resilience and discuss its many component parts. The conference aimed to establish what we mean by "resilience", how wide ranging the concept is, and to discuss the basis for future work to enhance resilience.



Concluding Plenary

The conference aimed to ensure that work during the German presidency is underpinned by solid expert advice. It sought to ensure that there is continuity between the work done under previous G20 presidencies and also work done in an academic and research context. The results are being channelled into the resilience debate in ongoing G20 meetings.

This event was not part of the official G20 meetings programmes, and participants were invited to express their opinions freely. This summary thus does not attribute any opinion to any specific person or national representative.

One purpose of the conference had been to collect a wide variety of points of view, both in terms of economic approaches and in terms of geography. There are thus few points on which everybody agreed. Therefore, the outcome of this event should be sought more in terms of the issues that need to be addressed, than in specific policy recommendations.

Structure of the Conference

The conference was organised around six thematic discussion groups meeting in parallel. Each of these six thematic groups had three separate sessions during which the more specific aspects of resilience were addressed. Brief statements by discussion leaders kicked off a general round of interventions in which all participants were able to contribute their views.

O Work stream 1: Public Debt

Sustainability and transparency

- Session 1.1 Enhancing transparency through public sector balance sheets?
- Session 1.2 Metrics and rules for debt sustainability
- Session 1.3 Sovereign debt and fiscal dominance

O Work stream 2: Private Debt

Deleveraging and avoiding bubbles

- Session 2.1 The central bankers' dilemma:

 Deleveraging or credit growth?
- Session 2.2 Asset price bubbles: Measurement and responses
- Session 2.3 How to make equity finance more attractive?

O Work stream 3: The Real Economy

Resilience through flexibility

- Session 3.1 Is there an SME myth?
- Session 3.2 Which structural reforms help foster resilience?
- Session 3.3 Flexibility vs. (social) security: Is there a contradiction?

O Work stream 4: Taxes

Improving the global framework

- Session 4.1 Domestic resource mobilisation
- Session 4.2 Investment and tax [un]certainty
- Session 4.3 Digital value added: How to tax the intangible?

O Work stream 5: Capital Flows

Shocks or shock absorbers?

- Session 5.1 Macro-prudential measures and capital controls: Substitutes or complements?
- Session 5.2 EMEs and capital flows: Is more better? What is more stable: bank or bond finance?
- Session 5.3 External effects of capital controls: Race to the top or the bottom?

O Work stream 6: The Global Financial Architecture

- Session 6.1 Global financial architecture: The macro and the micro picture
- Session 6.2 The IMF and RFAs: Cooperation, integration or competition?
- Session 6.3 Global safety nets: Better incentives versus more money?

We now turn to the six individual work streams.





Work stream 1 Public Debt

Sustainability and transparency Moderator/Rapporteur: Carmen Reinhart

Session 1.1 Enhancing transparency through public-sector balance sheets?

Main issues: Public-sector accounts are often full of surprises. In a crisis, hidden liabilities tend to emerge, aggravating problems that were already visible beforehand. But even in non-stressed situations, it is often not clear what the public sector owns nor what it owes (contingent liabilities). Drawing up audited balance sheets for the public sector (not just central government) would bring clarity, not only regarding solvency (the net asset – liability position), but also regarding resilience, i.e. the capacity of the public sector to withstand shocks.

Discussion leaders

George Kopits, Ian Ball and Guangyao Zhu

Summary of discussion

Transparency is a multifaceted notion. At least four different dimensions of transparency were identified: Institutional, Accounting, Projections (risk assessment), Behavioural (dependability).

On the accounting side, the example of New Zealand, which has shifted to an accrual-based system stands out. This system allows for high-frequency monthly reporting (like in private sector), in line with international standards, which increases international comparability. One could even argue for a more comprehensive balance sheet; this should not replace the simple view/cash flow. Too much complexity can lead to less transparency.

The most difficult part of national budgets, which are the legal foundation for spending and taxation is to predict the future. The forecasting record of governments but also international institutions is abysmal. The basis for forecasts should be made more transparent and confidence bands should be reported. The formation of an independent watchdog that would be responsible for ensuring the soundness of estimates, such as national fiscal councils, would be an important advantage.

Regarding the balance sheet, additional difficulties arise, on both the asset and the liability side.

Assets: Here the key issue is what assets should be counted in the public sector balance sheet. Different types of assets have to be handled in different ways. For example some property or infrastructure might yield no tangible return, in contrast to financial assets (which, however, need to be repeatedly revaluated). Liabilities: this side might contain substantial "hidden debt". Contingent liabilities should be included but remain very difficult to assess. Health care liabilities are probably more important but pension liabilities are easier to calculate, but this may be the wrong focus.

There was also a, controversial, discussion of the treatment of the Central Bank as part of the public sector. According to some its debt should be included in public debt figures. But by that logic, also future seigniorage streams should also be included in assets. However, this might lead to large arbitrary shifts on both sides of the balance sheet.

The bottom line was that more transparency is almost always beneficial, but this might be difficult to achieve. Transparency created during good times could enhance resilience, but a sudden increase in transparency during a crisis could trigger market panic, at least according to some participants.



Main issues: The analysis of debt sustainability is more an art than a science. The debt/GDP ratio remains the most widely used metric, but is it still relevant with interest rates close to zero? Can one really measure 'willingness' to service debt? In the case of Greece, the IMF has switched from the debt/GDP ratio to gross financing needs. Should this criterion be applied more generally? What rules would be best to ensure the longer-term sustainability of public debt?

Discussion leaders

Clemens Fuest, Niels Thygesen and José Luis Escriva

Summary of discussion

This session was a special case since the debate focused largely on the euro area, but it was still felt that useful lessons could be drawn at the global level.

A first issue was how to choose the right metric. For a rule-based system, a simple metric such as the debt/GDP ratio and deficit/GDP appeared the most appropriate. But, as discussed in the first session, in principle one should also take assets and contingent liabilities into account when assessing sustainability. But in practice this involves too much uncertainty – these more encompassing metrics should be used as complementary information.

On the flow side, structural balances were judged inherently error-prone (given the difficulties in output gap estimation), and thus not reliable, and ex-ante and ex-post assessments may substantially different. Sustainability appeared to be enhanced at present by low interest rates, but there was wide agreement that this will not last forever and preparations needed to be made for higher rates, ideally by building buffers.

It was also argued that investment should be taken into account separately since it increases future output and might thus, at least, partially pay for itself. For some

the golden rule (deficit should not exceed investment) should be considered (this would imply that the debt would not increase).

The discussion also touched on the issue of how the fiscal rule in the euro area could be reformed. Some favoured the golden rule, others more flexibility. The combination of hard rules, but flexible enforcement was seen as counterproductive from a political point of view.

An idea considered by some in this context was that any new debt issuance that exceeds the ceiling allowed by existing deficit rules could only be financed via "accountability bonds" – i.e. subordinate debt which could be subject to a loss (haircut, interest rate reduction and maturity extension) if certain conditions are met that signal a danger to sustainability like debt above a certain limit. These accountability bonds would be similar to so-called CoCos (contingent convertible capital).

Lastly, instilling ownership of fiscal rules was seen as key to any successful and long-lasting fiscal framework.







Session 1.3 Sovereign debt and fiscal dominance



Harvard University's Carmen Reinhart with Nobel-prize winner Chris Sims, Bocconi University's Guido Tabellini, and Goldman Sachs' Huw Pill

Main issues: An extensive literature emphasises the importance of the existence of a riskless asset for a well-functioning financial system. In banking regulation, public debt fulfils this role. But high levels of debt make public debt more risky. There is thus an inherent contradiction between the desire to increase the supply of riskless assets and the need to keep public debt safe by keeping debt ratios low. A related issue will arise when central banks exit from their unconventional policies. Will they still be able to control interest rates and their balance sheets when their actions might destabilise public debt markets?

Discussion leaders

Chris Sims, Guido Tabellini and Huw Pill

Summary of discussion

A first point concerned the relationships between monetary and fiscal policy. To many it appeared that monetary policy had been driven to its limits, with unconventional measures taken by all major central banks. Under these conditions only fiscal policy could still be expected to have a substantial impact on economic growth and inflation (expectations). But it was also emphasised that fiscal expansion needs to be complemented by structural reforms and the need for expansionary policies should diminish as countries return to full employment.

The state of the euro economy was then subject to a controversial discussion. Some thought that further fiscal expansion was needed to get inflation closer to the target of below, but close to 2 %. This fiscal expansion might even be financed by central bank money creation. In this line of thought 'helicopter money' would have the additional benefit of creating additional safe assets. However, this approach was contested on several grounds. It was not clear whether the additional central bank money created in this way would be spent or saved. Additional debt issuance may create the expectation that there will be a tax hike in future (Ricardian equivalence principle).

Moreover, and this was acknowledged by most, this approach would create massive moral hazard problems. The pressure for structural reforms to increase productivity and enhance resilience would be much reduced if short-term problems were addressed by expansionary monetary and fiscal policies.

Another controversial point concerned exit strategies for both monetary and fiscal policy. There was wide agreement that the exit might be challenging for central banks and therefore needs to be conducted with care, but it would become unavoidable sooner or later.

The exit from fiscal policy appeared more difficult. Independent central banks can be relied on to exit when inflation returns. But the political obstacles are much more serious for fiscal policy. For example, reversing tax cuts is always politically very difficult. Even supposedly temporary fiscal measures tend to become permanent.

Moreover, an expansionary stance today reduces the buffers available for the next downturn. This should be a concern in particular for countries close to potential output.



Private Debt

Deleveraging and avoiding bubbles

Rapporteur: Claudio Borio Moderator: Cinzia Alcidi

Session 2.1

The central bankers' dilemma: Deleveraging or credit growth?

Main issues: It is by now widely recognised that high levels of leverage threaten financial stability. But at the same time, many central banks try to stimulate credit growth because they find growth rates and inflation too low. But how can leverage decline without lower, or even negative credit growth? What can we learn from individual country experiences on to deal with non-performing loans and how to engineer a credit-less recovery?

Discussion leaders

Yung Chul Park, Isabel Schnabel and Stephen Cecchetti

Summary of discussion

Participants disagreed with the proposition that deleveraging and credit growth should be considered mutually exclusive. Deleveraging should be understood as recapitalising the banking system. Better capitalised banks would lend more and be better able to deal with non-performing loans. This was captured in the notion "healthy banks lend to healthy borrowers".

There was wide agreement on the need for higher minimum capital requirements, this raised the question why there is a push back against it. A number of arguments were put forward. First, much has already been done since the financial crisis. The

banking sector feels choked to an extent that providing credit to the real economy becomes difficult. This argument was immediately countered by a participant pointing out the lack of empirical evidence for higher capital requirements leading to less lending. Second, as capital moves easily on global financial markets, a level global playing field is important.

The discussion led to a conclusion: It is managing the transition from being poorly capitalised to being well-capitalised that is key. From a policy perspective, there is a problem: if weak banks cannot raise capital, should they be closed?

The wider implications of recapitalisation needed to be studied since higher capital implicitly forces a different risk/return structure on banks, which has a wider impact on investment decisions.

Speedy clean-up of balance sheets could be supported by the authorities via the development of a market for bad debt and by making foreclosure procedures more efficient.

Overall, a consistent and predictable policy mix is needed. Predictability is important because there is a strong negative link between policy uncertainty and credit growth. Being unsure about the regulatory environment may lead to high capital ratio, but low lending. Consistency is equally important as monetary and fiscal policy must dovetail with prudential measures to facilitate deleveraging.





Session 2.2 Asset price bubbles: Measurement and responses

Main issues: Since the bursting of the housing bubble in 2007-08, it is clear that bursting asset price bubbles can have very high economic costs. But it remains difficult to identify bubbles. Does any valuation exceeding some historical norm deserve to be classified as a 'bubble', which will soon burst? If so, how would one judge present long-term interest rates (or the prices of long-term bonds)? What is the real danger? High and rising asset prices, or the credit that was extended on the basis of high asset valuations?

Discussion leaders

Robert Shiller and Lewis Alexander

Summary of discussion

It was stressed first that asset price bubbles are complex phenomena that involve many aspects: Financial market theory, behavioural economics, sociology and neurosciences all can play a role. The focus was then put on narratives and how they reinforce bubbles. The problem is that there are often multiple narratives that are hard to disentangle. Regulation and narratives both play a role and interact. For example, China has a complex housing market where some rapid price increases have simple regulatory explanations, which in turn are the response to new narratives.

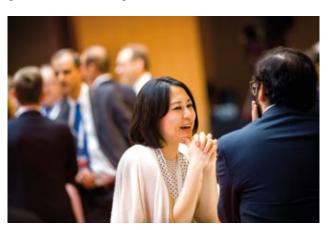
The political response then remains a matter of judgement. If narratives are key, monetary policy is not necessarily the right tool.

The term "bubble" is often misused. Not all asset price booms are bubbles (and end in crash). In the US, only two major crises happened in one century (1929 and 2007). But some asset price booms can nevertheless be dangerous.

Important questions remain: What type of bubbles should we care about? There is a difference between credit and non-credit bubbles!

On the measurement of bubbles (or rather the potential for a crisis), there was wide agreement that the single-

best indicator is credit growth (not so much the level of debt). Property prices booms are more dangerous than equity prices (the cost of an equity price bust is lower). This finding implies that one should reduce the incentives to channel funds to housing, especially when interest rates are low. This means that policy-makers should not follow the argument "we need credit to generate economic growth".



Stress tests can be a useful tool to identify the potential for a crisis resulting from a price crash, but even the best stress test can only give approximate indications.

The fact that many bubbles are local rather than global (especially in housing) raises the issue of who should be responsible for their management. National authorities had of course the main responsibility. But given the integration of global financial markets, especially credit markets, some coordination would be desirable.

Session 2.3

How to make equity finance more attractive?

Main issues: There is wide agreement today that equity finance is more stable, or rather more loss-absorbing and thus less subject to crises of confidence. It is difficult, however, to identify concrete measures that would have a concrete impact in terms of increasing the attractiveness of equity. After all, the tax advantage of debt should be less important in an environment of "low for long". The FSB has already made proposals to achieve better corporate funding structures. How can G20 countries be spurred to take action?

Discussion leaders

Bruno Colmant, Vitor Gaspar and Thomas Mayer

Summary of discussion

The starting point was the observation that the most tax regimes discriminate against equity. Corporate income tax systems generally allow for the tax deduction of interest payments, while return to equity is not considered a deductible expense. At the corporate level, this asymmetry favours debt over equity as a means of funding investments. Some countries (e.g. Italy and Belgium) have introduced an allowance for corporate equity (ACE). These have brought about different problems and participants reflected on how they could be improved. Instead of an allowance as in Belgium, taxing equity could be made incremental as is the case in Italy. The details of the tax schemes to encourage the use of equity is thus of utmost importance to avoid creating new distortions, for example if small firms or start-ups are treated differently.

The tax advantage of debt might not be the decisive reason for the limited use of equity. Another important reason is savers may be biased towards debt. This is immediately apparent where savings predominantly take the form of bank deposits. (Banks cannot use these deposits to invest in equity.) However, even when savings are invested in market instruments, cultural



IMF's Vitor Gaspar with Thomas Mayer, Flossbach von Storch Research Institute, Bruno Colmant, Degroof Petercam, and CEPS' Cinzia Alcidi

factors might limit the availability of equity financing if savers prioritise debt over equity.

People shy away from equity for three reasons: i) education/financial literacy; ii) there are no instruments that promote equity and are guaranteed by the government and iii) people fear volatility which they often confuse with losses. Exchange-traded funds (ETFs) are incorrectly used by many people as they are often sold in fire-sales in bad times.

Equity financing is particularly important for start-ups that typically do not have access to credit. The same applies to highly innovative companies more generally where banks have difficulties applying normal credit models. In these cases venture capital become key, but it is not always available. In Europe these funds tend to be small and often unable to finance firms above a certain size. European start-ups therefore often leave for the US when they grow.





Work stream 3

The Real Economy

Resilience through flexibility Moderator/Rapporteur: Ngaire Woods

Session 3.1 Is there an SME myth?

Main issues: Support for SMEs is a widely accepted policy goal. But research has shown that in many cases larger firms are more productive. In some countries, excessively small firm size is perceived as an obstacle to growth and higher productivity. Moreover, it is not clear whether smaller firms are more flexible given the limited investment they make in the general human capital of their employees. It is thus possible that in some countries the dominance of SMEs has a positive impact on growth and resilience, but not in others. Does it make sense to favour SMEs in general or should policymakers distinguish between SEs and MEs? Should one first address the regulatory barriers that impede the growth of small firms into becoming larger ones?

Discussion leaders

Andre Laboul, Helmut Kraemer-Eis and Jürgen Heraeus

Summary of discussion

Support for SMEs is, rightly, a widely accepted policy goal. But public policy must take into account that SMEs are not a homogeneous population of enterprises. Different categories need different policy actions. One needs to distinguish between small- and medium-sized ones, young and old, family businesses or those with professional management, new business models and tech-driven start-ups. Furthermore, there are large cross-country and sectoral differences, which require a thorough mapping to ensure that policies are appropriate for the SME population of relevance. Many discussant thought that it might thus be useful to establish a taxonomy of SMEs to enable a comparison of policies and exchange of best practices.

Support to SMEs can be categorised along two broad sub-objectives. The first is to assist SMEs in their quest for growth and higher productivity. Improving access to finance, removing regulatory barriers, facilitating investment, internationalisation and human capital accumulation and promoting sound management are all policies that move in this direction.

The second is of particular relevance for resilience of the labour market. Measures supporting self-employment and facilitating the creation of micro-enterprises can provide a concrete alternative to unemployment, but care needs to be taken to avoid subsidising unproductive subsistence activities. Advanced countries are more likely to focus on productivity and barriers to growth, whereas emerging economies are more focused on creating employment.

Financial constraints have often been the focus of policy action. Financing options for SMEs need to be multifaceted to match the different needs of the heterogeneous population of SMEs and their different stages of development. All kinds of instruments should be deployed as foreseen in the Capital Markets Union initiative of the European Commission, which will also emphasise the need to harmonise insolvency rules. The importance of the role of venture capital was discussed controversially in this context.

There was also a controversial discussion of the relative importance of different obstacles to SME growth. Some emphasised finance, others finding customers and skilled workers or regulatory, political and economic uncertainty. An excessive regulatory burden could be reduced by a commitment to modernise outdated regulation.

Session 3.2 Which structural reforms help foster resilience?

Main issues: Structural reforms have become the mantra of policy-makers almost everywhere. But it remains very difficult to determine whether the reforms that have formally been adopted increase flexibility and make a difference in reality. The OECD has various indicators suggesting in general that progress has been made, but survey indicators show little progress on the ground. How do we measure flexibility (and what kind of flexibility matters most for resilience)? What can we learn from the empirical literature about the reforms that increase resilience and growth?

Discussion leaders

Jacques Bughin, Bart van Ark and Rob Stewart

Summary of discussion

Rising inequality and the perception that many do not participate in the gains from globalisation and growth pose a threat to economic and political stability. Anti-trade, anti-immigration and anti-integration feelings spread more easily among those sectors of the population that feel excluded. This makes it more difficult to follow policies that foster growth and resilience. In countries where the focus on equality and the middle class has been stronger, Canada as a key example, populism is less of a problem. Restoring inclusive growth thus helps to maintain support for reforms and economic integration.

Structural reforms to enhance resilience will be necessary because digitalisation and automation are advancing perhaps even more quickly than in the past, affecting virtually every sector in ways that are sometimes impossible to anticipate. Technological chance has the potential to bring back growth, but it will act as a destabilising factor and recalibrate the balance of power among countries and sectors.

Strengthening anti-monopoly regulation and facilitating market exit become both more important

with digitalisation and automation. With old business models rapidly becoming obsolete, market exit cannot be avoided, but must be carefully facilitated and managed from a social point of view.

Another challenge is to maintain intergenerational equality in an ageing society, especially if a wide share of young people cannot find work. This might mean increasing the taxation of the older generation.

The role of investment in fostering resilience was also discussed, in particular in relation to investment in education, research, development and innovation. It was noted that, in national accounts, spending for education is not counted as an investment expenditure. Some thought might be given to taking spending for education into account when judging the macroeconomic stance of a country. But care needs to be taken to measure the productivity of this spending as well.

Another important factor to attain a resilient economy is the use of sound Active Labour Market Policies (ALMPs). Policies that promote activation, on-the-job training, re-skilling towards the skills needed in the future are the foundations of a more resilient and productive workforce.

Structural reforms are in the first instance a national responsibility. However, the G20 can add value, especially by monitoring spillovers. Structural reforms in one country can affect trading partners, for example via enhanced competitiveness or via changes of global value added chains. Moreover, ALMPs can have an impact on migration.





Session 3.3 Flexibility vs. (social) security: Is there a contradiction?

Main issues: This is an age-old conundrum. For a long time the Scandinavian model of 'flexicurity', which combines both of these two elements, has been held up as a worthy approach. Is this judgement still valid today? What kind of flexibility will stabilise an economy and thus help to secure social security? More flexibility might also increase the short-term impact of shocks, but with the advantage that the adjustment to a new equilibrium is also faster. Is there thus a trade-off between flexibility and (short-term) stability?

Discussion leaders

Enrico Giovannini, Piero Ghezzi and Alberto Alesina

Summary of discussion

This session started with a general discussion of the role of the G20 against the recent background of rising populism. The G20 should uphold the basic tenets of an open global economy and show how trade can remain an engine of growth. Growth would also deliver the means to ensure effective redistributive policies, which should in particular provide relief for the under-privileged.

In the more detailed discussion, the predominant opinion was that there should be no contradiction or trade-off between social security and flexibility. The set of policies commonly called "flexicurity" seemed to be able to promote dynamism in the labour market without undermining social rights. It was noted that flexicurity should be financed with cuts in spending and not by increasing taxation. Furthermore, it should rely largely on means-tested programmes.

More generally, it was noted that the G20 should promote a policy framework that does not hinge upon a trade-off between economic and social objectives. There was large consensus that the economic and social objectives often complement each other. Avoiding large inequalities and ensuring full employment can be seen a precondition for macroeconomic stability.

Implementing structural reforms that introduce flexibility in the labour market has proved to be a difficult task, as there is high resistance in the society, even from those who would benefit the most, e.g. youth. One lesson learned is the need to design reforms in a participatory manner.

With low wages, being employed does not prevent poverty or being at risk of social exclusion. Employment remains a key anti-poverty measure, but it needs to be complemented by policies that uphold the quality of work and wages. A human capital investment strategy for systemic resilience should ensure that high employment is compatible with high productivity and thus wages. This would help to lower the risk of poverty. Minimum income or minimum wage schemes were controversially debated, with the general proviso that wages could not be pushed above productivity.



Enrico Giovannini, University of Rome, Ngaire Woods, University of Oxford, Alberto Alesina, Harvard University, and former Peruvian Minister Piero Ghezzi

Work stream 4

Taxes

Improving the global framework

Rapporteur: Pascal Saint-Amans

Moderator: Karel Lannoo

Session 4.1 Domestic resource mobilisation

Main issues: Domestic resource mobilisation remains a problem in many countries. The key issues are usually domestic, but weaknesses in domestic tax administration can have large cross-border spill-over effects. How can global cooperation prevent tax base erosion and profit shifting if countries differ widely in their capacity to implement common rules?

Discussion leaders

Pedro Lacoste, Paul Collier and Erik Berglof

Summary of discussion

In some countries a large part of the economy remains untaxed (a figure of approximately 20% of GDP was mentioned as the global average). However, government support is expected from everybody. In some countries less than half (in an extreme example only about one third) of labour is engaged in the formal sector, while the vast majority of the population expects to receive a pension. This creates strong pressure on public finances and reduces resilience.

A minimum tax revenue is indispensable for any government to exist. But to mobilise resources the government also needs resources. Low resource mobilisation can thus become self-perpetuating in the absence of outside help. But the capacity depends not only on some minimum to get a tax administration started. The capacity to raise taxes is also highly

correlated to other indicators of good governance, such as the rule of law, a working justice system, absence of corruption, etc. When these general characteristics of good governance are lacking, it might be difficult to effectively mobilise resources. The lack of taxing capacity in any one country creates negative spill-overs in the form of tax havens, capital flights, etc.

There are examples of successful resource mobilisation, e.g. in Eastern Europe where the necessary capacity had to be built almost from scratch. This experience shows that capacity building could also be helped through close cooperation with more experienced tax authorities.

Taxing assets held abroad is particularly challenging for emerging economies. But there are solutions to this problem. Argentina has recently enacted a novel scheme of a voluntary tax declaration in order to bring the global assets of its residents into the open. The Argentinian government expects about \$100 billion in new assets to be declared, against a 10% penalty rate unless the person buys 7-year, low-yield bonds from the government.

A place where resource mobilisation is most needed is Africa, a large part of which is now confronted with a crisis that hit once its long boom in commodity prices came to an end. In order to avoid unsustainable deficits, many African countries will need to increase their tax revenues (in particular corporate income tax, which is quite difficult as the BEPS work has shown). To achieve a sustainable increase in resources, one needs to build and concentrate capacity. However, the expertise is currently fragmented across ministries; value added tax even creates net losses in some countries; tax





Executive Summary of Proceedings

officials working for their own interests instead of the country (capacity building to change the culture of corruption). Rwanda has been successful with its approach to reduce corruption and to foster a new kind of nationalism. To build trust one needs to firmly shift the norms that determine the parameters in which future governments can operate.



German Finance Minister Wolfgang Schäuble with Senator Mario Monti and Nobel laureate Prof Robert Shiller

Session 4.2

Investment and tax (un)certainty

Main issues: Uncertainty decidedly acts as a key brake on investment. The ongoing effort to close tax loopholes and improve the taxation of globally active corporations might thus have undesirable side effects. Can more coordination help to reduce uncertainty? Would it be useful to agree on some basic principles for tax policy to reduce the uncertainty for the private sector? What principles (accountable tax policy, low frequency of tax law changes, simple tax codes) can improve tax certainty?

Discussion leaders

David Rosenbloom and Johanna Hey

Summary of discussion

There is a general tendency for countries to emphasise their national sovereignty, especially in the area of taxation. But effective international tax cooperation actually supports national sovereignty in many cases by supporting tax income. There is thus a need for a general willingness on the part of countries to cooperate and agree to compromises. This willingness would be jeopardised if countries became more protectionist and nationalistic.

As a matter of fact, there is still a lot of tax competition among countries with similar interests, namely to attract foreign corporations by offering low rates. In these cases national tax policy reflects national interests, which creates prisoners dilemma (crowding out corporate income tax revenues). If too many countries take an uncooperative stance, a race to the bottom might ensue.

Global coordination is the key to solving international taxation issues (tax evasion/avoidance). But it is often difficult to achieve, especially in the current political environment.

A key mechanism for achieving global tax coordination is the Base Erosion Profit Shifting (BEPS) project of the OECD. It needs to be developed further because some emerging and developing countries are not members of the OECD, which might lead to multiple standards.



The key issue for taxpayers is not only how much tax has to be paid (and where), but to have reasonable certainty on the tax bill in advance. The higher the uncertainty about taxes, the higher the return companies are likely to demand before they invest. There is thus a need for clear and fair/neutral procedures to settle not only international disputes, but also at the national level. More international cooperation is thus required not only to safeguard tax revenues, but also make the international tax system more predictable.

Transparency can be used to enhance tax certainty. Besides information sharing of taxpayer to tax authorities, the taxpayer should also have access to its tax authority and there was a very controversial discussion whether corporate declaration/rulings should be opened to the public (e.g. Apple, Google, etc.).

Most certainty-enhancing measures in the field of taxation target large multinationals and put SMEs in some cases at a disadvantage (joint audits, etc.). Thus, enhancing tax certainty might also contribute to fight such failure and in turn boost investment.

Session 4.3 Digital value added: How to tax the intangible?

Main issues: With more and more services and content being traded in digital form, there is a need to reflect more deeply on how the tax system should be revamped to take this trend into account.

Discussion leaders

Sebastian Pfeiffer, Ekkehart Reimer and Michael Keen

Summary

Policy-makers need to think more broadly about digitalisation, since it touches on many issues in the economy. Digitalisation brings up issues that have already been difficult to manage in the past, such as intangible goods and two-sided markets.

In the domain of value added tax (VAT), the main challenge will be to tax final consumption, which ideally would occur in the country where the transaction takes place because consumers are generally not mobile. But in this case the place of consumption is essentially where the device is connected which was used to access the service.

A more difficult problem is to apply VAT for products that are 'free' (e.g. Google, Facebook or many others). There is no explicit price (and no monetary payment). The implicit price (often for a large bundle) is the personal data transferred. Consequentially, the questions arise whether this should then be considered a barter transaction (personal data against usage of platform) and should the consumer could in principle be taxed. In this case, one would need a model to determine the value of the transaction (value of leisure generated or of data transferred).

In the domain of corporate income tax (CIT), a key issue is where the value is being created. Google has, for instance, local establishments everywhere in Europe. But it asks advertisers to sign agreements





Executive Summary of Proceedings

with a subsidiary in Ireland, whereas the service is performed in the host country of the advertiser (advertising is still usually linked to language and national distribution chains). One could thus argue that the sales of advertisement should be attributed to the various host countries. In case companies are really active in the territory, without establishment, the allocation of the taxable income could be based on economic presence (e.g. sales or allocation based on arm-length measures).

Another important aspect in the digital economy is the fact that peer-to-peer transactions in part are not declared, creating unfair competition with other businesses that are paying VAT and other taxes.

Digitalisation could also make tax collection more efficient. Devices could report automatically to the tax authorities. Biometric identification could make allocation of fuel subsidies, etc. more efficient. The tax could become fairer, through for example averaging the taxable income over the entire life-time or taxing the total income of the shareholder instead of the corporate (CIT). Moreover, digitalisation is likely to reduce the number of cash transactions, which makes it more likely that income is being declared.



Work stream 5

Capital Flows

Shocks or shock absorbers?

Rapporteur: He Jianxiong Moderator: Daniel Gros

Session 5.1

Macro-prudential measures and capital controls: Substitutes or complements?

Main issues: Financial crises often arise from a sudden stop to capital flows. One way to limit this danger is to restrict capital flows. Another approach would be to structure the financial market in such a way that the damage from a sudden stop is limited. Which approach is more promising? Is there a need to coordinate between the countries receiving capital inflows and those from which the capital originates (or is it intermediated)?

Discussion leaders

Maurice Obstfeld and Claudia Buch

Summary of discussion

There was wide agreement that capital controls (also called capital-flow management measures, or CFMs) and macro-prudential measures (MPMs) are complements rather than substitutes. Both can be employed alongside standard macroeconomic policies, like monetary or exchange rate policies. The optimal mixture depends on the available policy space and the objectives pursued in individual countries and their suitability at a given time in the business/financial cycles.

CFMs and MPMs can overlap when large capital flows become a potential source of systemic risk (e.g. capital inflows into the domestic banking sector that can fuel a housing bubble – limits on the credit for real estate transactions).

Emerging economies have tended to use capital controls more often since exchange rate volatility was the root problem, whereas developed economies tended to perceive asset price volatility as the problem, hence a focus on MPMs.

In practice the distinction between CFMs and MPMs might be less clear than in theory, especially in the emerging economies. In some of the largest emerging economies the long-standing, permanent legal and administrative frameworks that underpin capital controls are often justified as MPMs.

Despite decades of experience with capital controls, the empirical literature on their effectiveness, i.e. in terms of influencing the volume and composition of flows, or avoiding exchange rate mis-alignments, remains 'surprisingly' inconclusive. Care needs to be taken to avoid capital controls becoming ingrained, as there is never a good time to relax them. In the meantime, they could encourage rent-seeking, hamper the development of financial markets and prevent necessary adjustments.

More evidence is emerging on MPMs, with some studies analysing the impact on mitigating excessive credit growth (bank-level data) and the build-up of leverage.

Going forward, it was argued that both capital controls and MPMs should take into account that non-bank financial institutions will continue to gain importance in financial intermediation, and also that digitalisation of financial services may significantly change the configuration of capital flows. Continued vigilance was thus required. The availability of data could be improved in terms of the timeliness, scope and granularity of data on capital flows. A comprehensive database stored at a one-stop information hub for MPMs should be considered.





Session 5.2

EMEs and capital flows: Is more better? What is more stable: bank or bond finance?

Main issues: The role of global capital markets is in principle to channel the flow of capital from (capital) rich countries to poorer emerging economies (EMSs). But experience has shown that the form of these flows has a huge impact on financial stability. In particular, short-term portfolio flows have often been identified as posing the greatest danger to financial stability. Is less better in this case? In the 1990s banks were in trouble because of their exposure to EMEs, and bond finance seemed more stable. This changed again after Argentina. What provides more resilience: bank or bond finance?

Discussion leaders

Amar Bhattacharya, Domingo Cavallo and Gene Frieda

Summary of discussion

A first observation was that the trend in capital flows may no longer be mainly from advanced to emerging economies but from savings-rich to savings-deficit countries within the emerging economies. For example, in Latin America, investment needs are higher than domestic savings, hence the need for foreign capital.

At the cyclical frequency, capital flows to emerging markets tend to be quite pro-cyclical and are often linked to turning points in monetary policy in advanced economies (e.g. the so-called 'taper tantrum' episode in 2013). Volatility in capital flows is thus 'a fact of life' in emerging economies. One concern is that 'push' factors will become more important than 'pull' factors in a world of diverging monetary policies.

In response to inflow surges or disruptive outflows, emerging economies can resort to traditional instruments which should, however, be calibrated to the circumstances. Inflows represent an occasion to build up countercyclical buffers, whereas in the case of disruptive outflows, the exchange rate might have to absorb the shock.

The form that cross-border flows take is important along three dimensions: the type of instrument (debt

or equity, bond or bank finance), the maturity (short or long-term) and the different layers of intermediation (banks and non-banks).

There was agreement that long-term, non-debt flows are preferable to short-term debt flows. Among debt instruments, bank and bond finance present both risks and benefits. FDI (including in the financial sector) was deemed as the relatively most stable component.

Where local capital markets remain underdeveloped (Latin America), foreign capital flows should continue to be channelled via the local banking system, which is perhaps better equipped to evaluate the risk of potential borrowers. Nonetheless, it is desirable to bring foreign finance to the domestic market through local institutional investors.

A key development for the future is that the intermediation of capital flows is changing. Non-banks, in particular asset managers, are now managing larger shares of capital flows. Asset managers are real money investors, but since they must promise immediate redemption, they are also confronted with maturity mismatch and liquidity transformation issues. In addition, large waves of fund redemptions can have systemic implications as emerging markets have an important asset class due to the search for yield by investors. Waves into and out of this investment class by vehicles following market benchmarks could be pro-cyclical and destabilising in the event of a sudden loss of confidence.



CEPS' Karel Lannoo speaking to a participant during a break

Session 5.3 External effects of capital controls: Race to the top or the bottom?

Main issues: The imposition of capital controls might produce external effects. If a country imposes controls in a crisis, financial markets might anticipate a similar move elsewhere, thus leading to capital flight in other countries and possibly even forcing these countries to impose controls as well. Is some coordination required in this area to limit systemic effects? What is the role of the OECD and the IMF's codes of conduct and rules in this area?

Discussion leaders

Catherine L. Mann, Robert Kahn and Rajeswari Sengupta

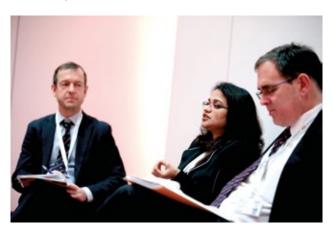
Summary of discussion

Decisions on capital controls are usually taken by the country concerned without much international or global coordination, as their purpose is to support national economic policy. However, there is a case for coordination as there are a number of ways in which external effects can emerge. For example, if there is regional boom, tightening of controls on inflows by any one recipient country can lead to more inflows and currency appreciation in other countries in the region (dubbed 'bubble thy neighbour').

But policies in source countries can also result in destabilising flows in the recipient countries. This has two aspects. Monetary policy in the advanced economies might have side effects on overall flows to emerging economies. Should this be taken into account when setting policy? Moreover, changes in controls on outflow by source countries could also increase or reduce the funding available for savings-deficient emerging markets. There are thus ample reasons to coordinate capital flow measures. The same also holds true for macro-prudential policies. Emerging economies should benefit if advanced economies would dampen their own cycle.

There was need for more organised/transparent discussion between source and recipient countries about their choice of policy tools and their preferred composition of flows (trade-off financial stability and growth). Different fora, the G20, the IMF and the OECD (with its code of conduct) all covered part of the agenda.

What could be the objective of global coordination on capital account measures and their liberation? To many, a reduction in the volatility of capital flows appears desirable, but some volatility over the cycles seems unavoidable. Increasing the resilience of the financial system to this volatility needs to be also part of the response.



CEPS' Daniel Gros with Rajeswari Sengupta, Indira Ghandi Institute of Development Research, and Robert Kahn, Council on Foreign Relations





Work stream 6

The Global Financial Architecture

Rapporteur / Moderator: Hélène Rey

Session 6.1

Global financial architecture: The macro and the micro picture

Main issues: Ensuring the resilience of the global financial system requires attention to macroeconomic factors, such as current accounts, external debt, etc. But the way macroeconomic imbalances are resolved also depends on the structure of financial markets, in both creditor and debtor countries. Is one factor more important than the other? How can one integrate these two aspects?

Discussion leaders

André Sapir and Richard Portes

Summary of discussion

The discussion started with general concerns about global governance in an age of populism and weak global economic performance. If the view that the global economy can be understood as a zero sum game gains ground, it will become more difficult to provide global public goods, such as a stable global financial architecture.

There was thus a need to restore the broader legitimacy of the global framework by re-connecting global governance with nation states and the broader public. Effective global governance rests on two pillars: countries need to keep their own houses in order, but they also need to cooperate.

The importance of 'keeping one's own house in order' was highlighted by the much stronger resilience of Latin America and Asia after their respective crises. In Latin America, a financial meltdown was (so far) avoided largely as a result of the reforms to their domestic financial systems after the 1990s. However, keeping

one's house in order alone is not sufficient. In a highly integrated world, there are important international spill-overs. It is thus not sufficient to prepare only domestically for unknown shocks.

It was noted that there has been significant progress since the crisis on both macro- and micro-prudential policies, especially in the EU and the US, where the banking system has been strengthened through tighter regulations and better supervision. Moreover, the macro-prudential policy framework had been created to be able to identify and react to systemic threats.

Two major potential challenges for the future were identified: digitalisation of the economy and the advent of FINTECH. Too little was known about either of them. The G20 should position itself more at the forefront of the research agenda, and think more about the role of FINTECH and its interaction with other market participants. These are global phenomena, which require a global analysis.

Another issue was the growth of shadow banking. A large part of European bank exposure to shadow banks is outside the EU. This raises important regulatory issues that could be best addressed through a global body.



left-to-right Nobel-prize-winner Chris Sims, Bundesbank Governor Jens Weidmann, People's Bank of China He Jianxiong, German Finance Minister Wolfgang Schäuble, Nobel-prize-winner Robert Shiller and Italian Senator Mario Monti

Session 6.2

The IMF and RFAs: Cooperation, integration or competition?

Main issues: Regional financing arrangements (RFAs) might fulfil a useful role in areas where regional financial links are particularly strong. In the case of the euro area, the IMF has come in alongside the ESM. Is there the danger of a race to the bottom in terms of conditionality in the absence of coordination between the global and regional safety nets?

Discussion leaders

Rakesh Mohan, Klaus Regling and Yide Qiao

Summary of discussion

A first point was that given the increasing interconnectivity of the global economy and financial markets, the consequences of even local crises tend to become more systemic. Given its global membership, the IMF should remain the central platform for cooperation.

While there were different views expressed about the role of the IMF, it was agreed that increased cooperation as well as information and knowledge sharing with other regional and national institutions are needed. The IMF could also be a platform to facilitate more active cooperation and information exchange.

Regional safety nets are required if regional financial linkages are particularly strong, as in the euro area, where the ESM has now outstanding lending which is several times larger than that of the IMF. Other existing regional arrangement have been much less active, e.g. the Latin American Reserve Fund and the Arabic Fund.

RFAs (regional financing arrangements) might generate important spill-overs, which warrant some degree of standardisation. One key potential problem is insufficient conditionality, which can lead to insufficient adjustment and further crisis, thus forcing the IMF to pick up the pieces.

The best way to limit this problem would be to harmonise/coordinate practices across RFAs, working together on conditionality, including bank recapitalisation, and sovereign debt restructuring.

There needs to be clarity concerning which taxpayer will have to pay the bill if a rescue operation does not work out as planned. These tensions had been visible in the euro area.

One obstacle for a stronger role of the IMF is the 'stigma' attached to its programmes. It is politically impossible for most countries in Asia to go to the IMF (20 years after the crisis). Reducing the issue of stigma – portraying the IMF not just as a bad cop but a rather as a good doctor-would take some communication effort.



Carmen Reinhart, Harvard University





Session 6.3

Global safety nets: better incentives versus more money?

Main issues: The global financial crisis has illustrated the importance of safety nets, which were strengthened in many parts of the world. But stronger safety nets also create moral hazard problems. Given the current excess supply of savings, the general question of liquidity versus insolvency arises again: Is there a need for a larger global safety net or stronger incentives to strengthen resilience at the national level?

Discussion leaders

Dennis Snower, Samir Saran and Guillaume Chabert

Summary of discussion

There was general agreement that both regional and global safety nets were needed, but also that the incentive structure should be aligned with the amount of resources available. Conditionality and commitment to policy reform are indispensable for credible arrangement, but the size of the safety net should also be sufficient to prevent a bad equilibrium under which market panic could lead to an unwarranted crisis.

Given the rapid growth in the size of global financial markets, there was a concern that in some cases the IMF could lack the capacity to break the bad equilibrium. This led to a discussion of the potential solutions for the IMF to leverage up its resources to face potential future global challenges. One idea was for the IMF to become a coordinator of swap lines among central banks. Another idea mooted was a revolving facility with a central bank for short-term liquidity events. Generating more liquidity through SDR issuance was also mentioned. However, all of these solutions remained controversial. One key problem that remains difficult to resolve is that of the relative strength of the incentives to reinforce the resilience of the system as a whole, versus the strength of incentives to reinforce resilience at the national level. Both had to be undertaken in parallel.

Finally, it was argued by some that there were still some inconsistencies in parts of the patchwork of global safety nets. For example, only a few countries can use swap

arrangements. Moreover, one might argue that there is a need for a new kind of safety net to help countries deal with challenges from globalisation, digitalisation and possibly even climate change.

Concluding Panel

The event closed with a final plenary session during which the rapporteurs of the different work streams summarised the discussion in their groups.

Daniel Gros emphasised the need to take a systemic view of resilience. Action in many different policy areas can enable economies to withstand shocks. Lower public and private debt levels are a necessary, but not sufficient, condition for a resilient economy. A stronger global financial system is also essential to avoid the propagation from one country to the next. Structural reforms also contribute. This not only concerns reforms in labour and products that can make the real economy more flexible, but also changes in the tax system that reduce the bias towards debt in the financing of the corporate sector.

Ludger Schuknecht concurred that the overarching theme of the event had many different aspects. He observed that the in-depth discussion would constitute an important input to the work of the G20 on this issue. He underlined the need to take a more long-term view, which would also reflect confidence in the political institutions. The past difficult years should not be a reason to become pessimistic. With the improvement in the economic climate, there should be room for the emergence of a 'virtuous cycle' to improve resilience and the G20 should be in the forefront of this effort.



Left-to-right, Ludger Schuknecht, German Ministry of Finance, Carmen Reinhart, Harvard University, Claudio Borio, BIS, Ngaire Woods, University of Oxford, Pascal Saint-Amans, OECD, He Jianxiong, People's Bank of China, Hélène Rey, London Business School, Daniel Gros, CEPS









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