

Indian Council for Research on International Economic Relations

10th Annual International G20 Conference

From Global Cooperation to Building Consensus: Views from G20 Countries

Panel Discussion:

**“Evaluating Global Financial Architecture and
Regulatory Practices – Progress and the Way Forward”**

October 11-12, 2018 at India Habitat Centre, New Delhi, India

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Overview

- **The Global Financial Architecture**
- **How have financial markets adjusted in the wake of the GFC?**
- **Progress on the G 20 Financial Regulatory reform agenda**
- **Global Finance and the Real Economy**
 - **Near Term Risks**
 - **Longer Term Prospects**

Global Financial Architecture

- **Global Financial Assets** estimated at \$ 340 trillion in 2016, about five times the size of the global economy
 - **Shadow banking** about 50% of this by broad measure and 15% by narrow measure
- **AEs** much **more leveraged** than EMEs.
- **Non-bank credit** much more important in **AE** financial markets than in EMEs that are dominated by bank credit. (*Excludes informal sector*)
- In **Europe Bank credit** as significant as non bank credit.
- **US Financial Markets the biggest** and deepest in the world, accounting for over 40% of global financial assets (Western Europe and Asia ex-Japan 20% each, and Japan 10%) : When US financial markets sneeze global markets catch a cold.
- The **US dollar** is the global reserve currency, and US monetary policy a major driver of the direction of cross border capital flows.
- During the **GFC** it was above all actions by the **US Federal Reserve** that stabilized financial markets.
- The **Bretton Woods** institutions, once at the centre of the Global Financial Architecture after WW II, have gradually **diminished in size and importance**, even for the major EMEs. Role mostly confined to **surveillance** and policy advice

Financial Markets 10 Years after GFC - 1

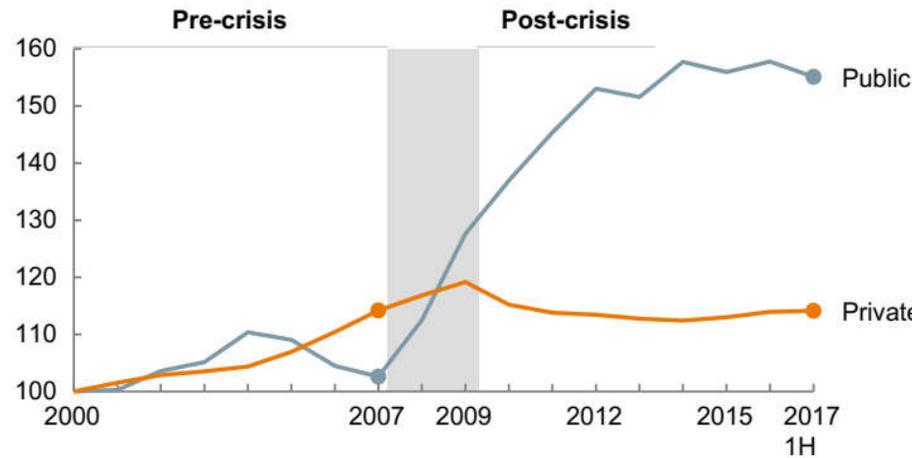
- **Overhang of liquidity not leading to CPI**, a continuation of pre crisis trend.
- **Asset Prices** have rebounded strongly
 - In 2017 DJIA higher as proportion of US GDP than in 2007
 - Real housing prices at 2004-05 levels
- Following bailouts and write-downs **American Banks have recovered more strongly** than European banks
 - stock prices and ROE lower than in the heady days preceding the GFC.
- **Australian and Canadian** Banking systems hardly **affected**.
- **European Banks** have **shrunk sharply**, perhaps because of weak resolve of governments to bail out banks or enforce write-downs
 - Positive for the 'too small to bail out' problem
 - Negative in view of the trend towards domestic consolidation of international banks
 - Negative in view of the greater importance of bank credit in Europe
- **Big banks have become bigger** in the consolidation process.
 - Top 20 FIs accounted for 42% of AUM versus 38% in 2008

Financial Markets 10 Years after GFC - 2

- **Leverage in AEs**, already high pre-crisis, has **continued to grow**:
 - Private leverage as % of GDP has remained the same
 - Public Debt as % of GDP has risen sharply
- **EMEs** have taken advantage of low rates to **borrow more**
 - Non-financial Corporate debt increased most (from 57% of GDP in 2007 to 93% in 2017), followed by households (19% to 35%). Public debt increase (37% to 48%) modest in comparison. (BIS data)
- **Central bank balance sheets** have increased dramatically:
 - US Fed balance sheet has just begun to shrink; ECB and BOJ still expanding
 - QE has underwritten the recovery of the western financial system: still on life support?
 - QE has underwritten fiscal expansion by keeping market interest rates low?

Overall leverage in AEs continues to increase

Debt by sector in advanced economies¹
% of GDP (Index: 100 = 2000)



Change in debt-to-GDP ratio
Percentage points

2000-07 2007-H1 2017

Public +2 +35

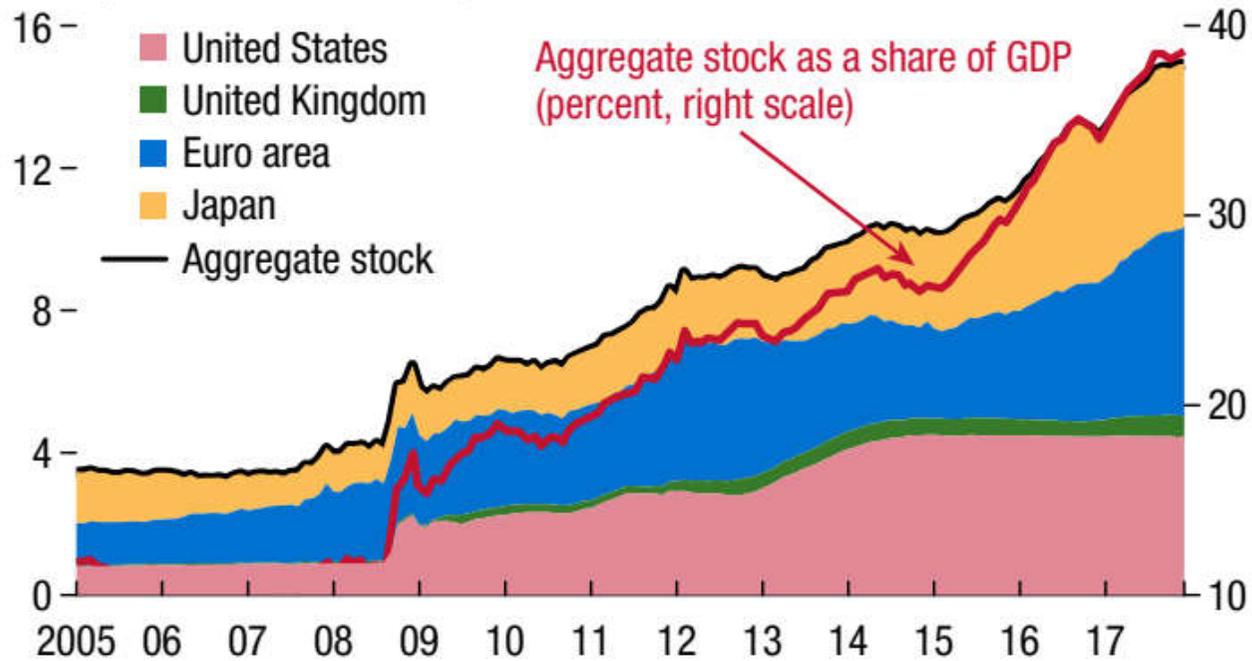
Private² +20 0

Actual debt-to-GDP ratio %
Public 69 105
Private 164 164

Public Debt/GDP		
	1999-08 Av	2017
US	62	104
UK	40	90
France	63	97
Italy	103	133
Germany	63	65

Easy global financial conditions are underpinned by advanced economy central banks' large asset holdings.

1. Change in Central Banks' Balance Sheet Assets (Trillions of US dollars)



<https://www.imf.org/en/Publications/GFSR/Issues/2018/04/02/Global-Financial-Stability-Report-April-2018>

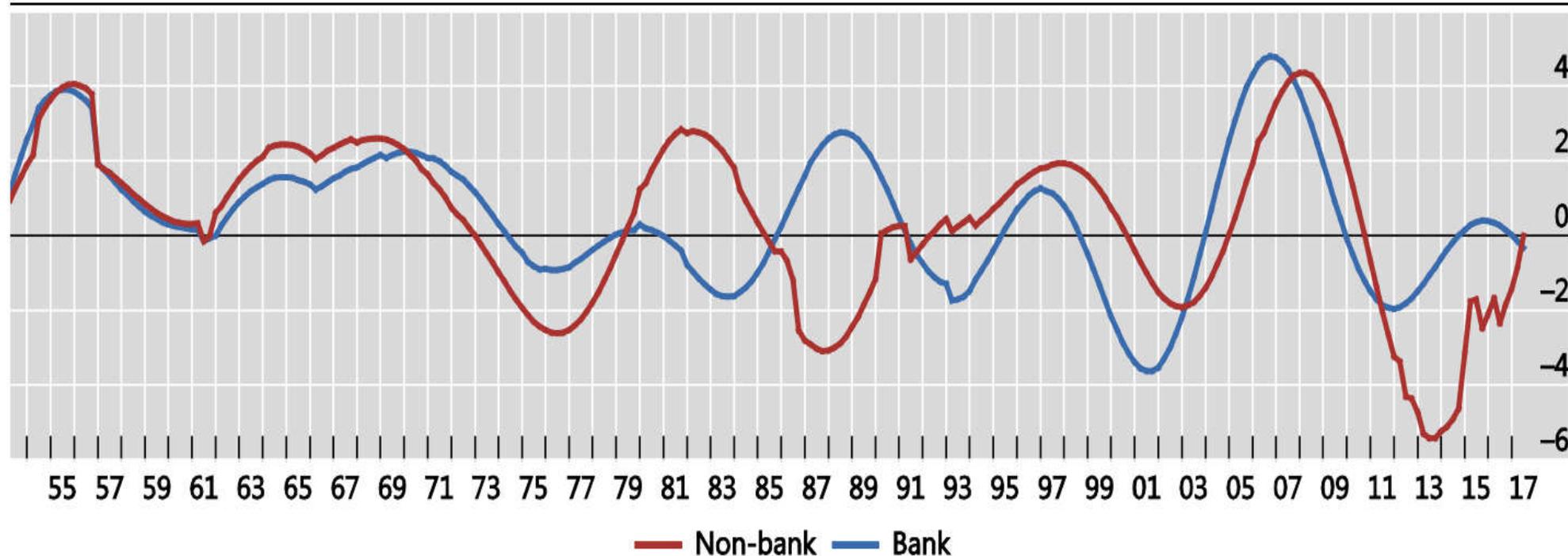
Financial Markets 10 Years after GFC - 3

- **Shadow Banking**, which shrank more than the banking system, after the crisis, seems to be rebounding more strongly than the banking system
 - Between 2011-15, assets of non-deposit taking FIs have grown at over twice the compound rate of deposit taking banks.
 - US ABS issuance, including CDOs, have rebounded strongly. At 2004 levels in 2017 as proportion of GDP.
 - Basel III to blame?
- **Cross border** capital flows have declined
- **FC reserves of EMEs** however went up despite decline in global imbalances
 - In search of yield – low rates in AEs
 - In search of security – better growth prospects: decoupling hypothesis
 - Increase of over \$ 3 Trn between 2009 and 2013, followed by decline of \$ 700 bn between 2014-17 as the decoupling hypothesis slowly loses credibility.

Bank and non-bank credit cycles

Percent, 4-quarter changes

Exhibit A3-1-3



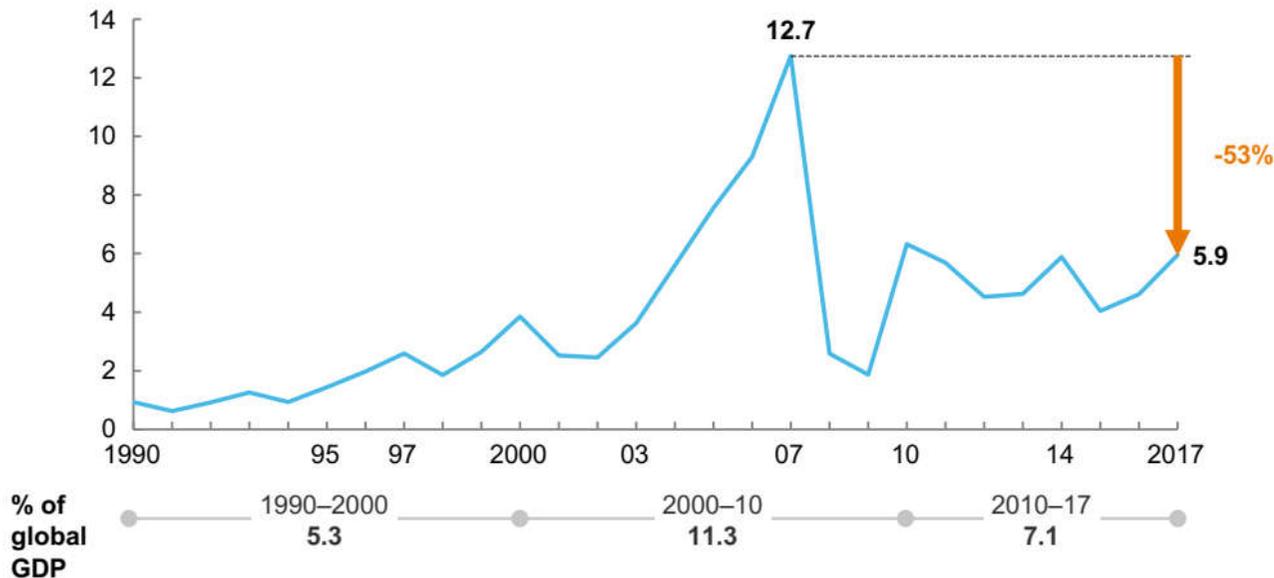
Source: BIS total credit statistics, available at <https://www.bis.org/statistics/totcredit.htm> and authors' calculations.

<https://www.bis.org/publ/arpdf/ar2018e.htm>

Cross-border flows of capital have declined

Global cross-border capital flows have declined 53 percent since the 2007 peak.

Global cross-border capital flows¹
\$ trillion



1 Gross capital inflows, including foreign direct investment (FDI), debt securities, equity, and lending and other investment.

SOURCE: IMF Balance of Payments; McKinsey Global Institute analysis

McKinsey Global Institute: A DECADE AFTER THE GLOBAL FINANCIAL CRISIS: WHAT HAS (AND HASN'T) CHANGED? (BRIEFING NOTE SEPTEMBER 2018)

GFC Financial Regulatory Reform

- Under the **overall guidance of G 20 Leaders**.
- The restructured Financial Stability Board (**FSB**) the chief agency used by the G 20 for coordinating the reform efforts of national authorities and international standards setting bodies like **BCBS** (Basel Committee for Banking Supervision) for banks, and **IOSCO** (International Organization of Securities Commissions) for shadow banking.
- Reform of the new **Basel III** framework for internationally active **banks** system the centerpiece, under the supervision of BCBS
- Monitoring **Shadow Banking** activity through **FSB** and **IOSCO**.
- **National legislation** like Dodd-Frank (US) and MIFID II (Euro area)
- The **Basel III** reforms now **finalized** and complete
- The **big issues** now:
 - **Implementation and phasing**
 - **Regulatory framework for non-banks** that were at the epicenter of the GFC.
 - Adverse spillovers of reforms on **EMDEs** to be monitored, as advised by FSB to G 20 in 2012

Basel III phase-in arrangements: key standards¹

Table III.1

Standard	Adoption year	Requirement	Phase-in from year	Full implementation year
Stage 1: Capital and liquidity				
Capital definition	2010	CET1; deductions	2013	2022
Minimum CET1 ratio (Common equity tier 1)	2010	4.5%	2013	2015
Capital conservation buffer	2010	2.5%	2016	2019
Countercyclical buffer	2010	0–2.5%	2016	2019
G-SIB capital surcharge	2010	0–3.5%	2016	2019
Leverage ratio (LR)	2010	3%	2015 (disclosure)	2018
<i>Securitisation framework</i>	<i>2014</i>	<i>Revised framework</i>		<i>2018</i>
<i>Market risk framework</i>	<i>2016</i>	<i>Revised framework</i>		<i>2022</i>
Liquidity Coverage Ratio	2010	100%	2015	2019
Net Stable Funding Ratio	2010	100%		2018
Stage 2: Tackling RWA variability (Risk Weighted Assets)				
Output floor	2017	72.5%	2022	2027
LR revisions/G-SIB surcharge	2017	50% scaling factor		2022
Credit risk framework	2017	Revised framework		2022
Operational risk framework	2017	Revised framework		2022

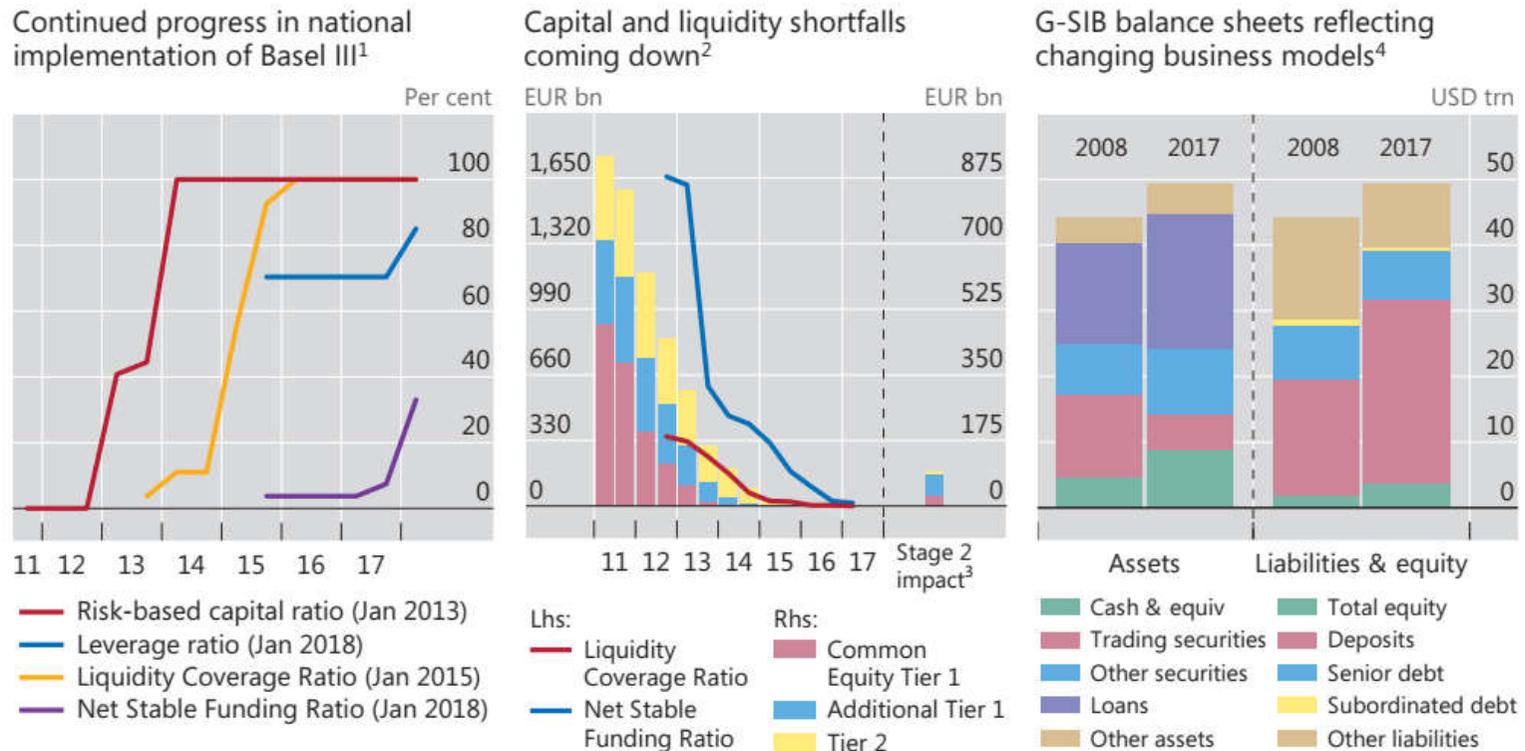
¹ The Basel framework distinguishes three pillars: (i) minimum capital requirements, (ii) supervisory review and (iii) market discipline, based on standardised disclosures. Complementary reforms, such as enhanced bank resolution regimes, are implemented in parallel.

Sources: BCBS; BIS.

<https://www.bis.org/publ/arpdf/ar2018e.htm>

Implementation of new requirements and banks' adjustments are progressing

Graph III.3



¹ Percentage of BCBS member jurisdictions in which each standard is in force; agreed implementation dates in parentheses. ² The height of each bar shows the aggregated capital shortfall considering requirements for each tier (ie CET1, Additional Tier 1 and Tier 2) of capital for the major internationally active banks monitored by the BCBS (BCBS (2018)). ³ Estimates based on end-2015 bank balance sheet information (BCBS (2017), Table 3). ⁴ Total values; based on a balanced sample of 28 G-SIBs. Cash & equiv = cash and cash equivalents.

Sources: BCBS; BCBS, *Basel III monitoring report*, December 2017 and March 2018; SNL; BIS calculations.

<https://www.bis.org/pub/arpdf/ar2018e.htm>

G-SIBs as of November 2017⁹ allocated to buckets corresponding to required levels of additional capital buffers

Bucket¹⁰	G-SIBs in alphabetical order within each bucket
5 (3.5%)	(Empty)
4 (2.5%)	JP Morgan Chase
3 (2.0%)	Bank of America Citigroup Deutsche Bank HSBC
2 (1.5%)	Bank of China Barclays BNP Paribas China Construction Bank Goldman Sachs Industrial and Commercial Bank of China Limited Mitsubishi UFJ FG Wells Fargo
1 (1.0%)	Agricultural Bank of China Bank of New York Mellon Credit Suisse Groupe Cr�dit Agricole ING Bank Mizuho FG Morgan Stanley Nordea Royal Bank of Canada Royal Bank of Scotland Santander Soci�t� G�n�rale Standard Chartered State Street Sumitomo Mitsui FG UBS Unicredit Group

<http://www.fsb.org/wp-content/uploads/P211117-1.pdf>

Shadow Banking

- At the **2011 Cannes Summit** G 20 leaders resolved to develop policies to deal with shadow banking.
- **FSB recommendations** on shadow banking published in 2013:
 - Mitigate the spill-over effect between the regular banking system and the shadow banking system
 - Reduce the susceptibility of money market funds (MMFs) to “runs”
 - Assess and align the incentives associated with securitization
 - Dampen financial stability risks and pro-cyclical incentives associated with securities financing transactions such as repos and securities lending that may exacerbate funding strains in times of market stress
 - Assess and mitigate systemic risks posed by other shadow banking entities and activities
- **Recommendations still in the process** of being translated into operational guidelines to facilitate consistent national implementation.
- **Monitoring** done regularly by FSB
- **Resolution efforts for non banks**, including central counter parties, remains work in progress.
- **Reform agenda for insurers** has not kept pace with planned guidelines

Table on implementation of reforms in priority areas by FSB jurisdictions (as of 30 June 2017)

The table provides a snapshot of the status of implementation progress by FSB jurisdiction across priority reform areas, based on information collected by FSB and standard-setting bodies' (SSBs) monitoring mechanisms. The colours and symbols in the table indicate the timeliness of implementation. For Basel III, the letters indicate the extent to which implementation is consistent with the international standard. For trade reporting, the letters indicate to what extent effectiveness is hampered by identified obstacles.

Reform Area	Basel III ^a					Compensation	Over-the-counter (OTC) derivatives (as of 30 June 2017)				Resolution			Shadow banking		
	Risk-based capital	Liquidity coverage ratio (LCR)	Higher loss absorber-ency for G-SIBs (home jurisdictions)	Requirements for D-SIBs	Leverage ratio		Net Stable Funding Ratio (NSFR)	Trade reporting	Central clearing	Platform trading	Margin	Minimum TLAC requirement for G-SIBs (home jurisdictions)	Transfer / bail-in / temporary stay powers for banks	Recovery and resolution planning for systemic banks	Transfer / bridge / run-off powers for insurers	Money market funds (MMFs)
Agreed phase-in (completed) date	2013 (2019)	2015 (2019)	2016 (2019)	2016	2018	2018	end-2012	end-2012	end-2012	2016 (2020)	2019/2025 (2022/2028)					
Argentina	C	C					Δ								**	**
Australia	C														*	
Brazil	C						Δ	F							**	**
Canada	C							D, F							**	
China	C, Δ	C	C				Δ	R, D, F								
France	MNC	LC	C												**	*
Germany	MNC	LC	C												**	
Hong Kong	C	C													**	
India	C	LC					Δ	D, F							**	
Indonesia	LC	C						R							**	
Italy	MNC	LC	C													*
Japan	C	C	C					D								
Mexico	C	C						D							**	*
Netherlands	MNC	LC	C												**	*
Rep. of Korea	LC	C						D							**	
Russia	C	C					Δ								**	
Saudi Arabia	C	LC						R, D							**	
Singapore	C	C													**	
South Africa	C	C					Δ	D, F							**	
Spain	MNC	LC	C													*
Switzerland	C		C												**	
Turkey	C	C						D, F							**	
United Kingdom	MNC	LC	C												**	*
United States	LC	C	C	&			Δ									

Legend

	<ul style="list-style-type: none"> Basel III: Final rule published and in force. OTC derivatives: Legislative framework in force and standards/criteria/requirements (as applicable) in force for over 90% of relevant transactions. Resolution: Final rule for external Total Loss Absorbing Capacity (TLAC) requirement for G-SIBs published and implemented. Element of resolution regime in the FSB Key Attributes of Effective Resolution Regimes for Financial Institutions (Key Attributes) that is implemented/in place. For the powers columns, all three of the resolution powers for banks (transfer, bail-in and temporary stay) and insurers (transfer, bridge and run-off) are available. Both recovery and resolution planning processes are in place for systemic banks. Compensation: All FSB Principles and their Implementation Standards for Sound Compensation Practices (Principles and Standards) implemented. Shadow banking: MMFs – Final implementation measures in force for valuation, liquidity management and (where applicable) stable net asset value (NAV). Securitisation – Final adoption measures taken (and where relevant in force) for implementing an incentive alignment regime and disclosing requirements.
△	<ul style="list-style-type: none"> Basel III: Final risk-based capital rule in force, with the exception of countercyclical capital buffer rule. Compensation: All except a few (three or less) FSB Principles and Standards implemented.
	<ul style="list-style-type: none"> Basel III: Final rule published but not in force, or draft regulation published. OTC derivatives: Regulatory framework being implemented. Resolution: Final rule for external TLAC requirement for G-SIBs published but not yet implemented, or draft rule published. Element of resolution regime in the <i>Key Attributes</i> that is partially implemented / in place. For the powers columns, one or two of the resolution powers for banks (transfer, bail-in and temporary stay) and insurers (transfer, bridge and run-off) are available. Recovery planning is in place for systemic banks, but resolution planning processes are not. Compensation: FSB Principles and Standards partly implemented (more than three Principles and/or Standards have not yet been implemented) Shadow banking: MMFs – Draft/final implementation measures published or partly in force for valuation, liquidity management and (where applicable) stable NAV. Securitisation – Draft/final adoption measures published or partly in force for implementing an incentive alignment regime and disclosing requirements.
	<ul style="list-style-type: none"> Basel III: Draft regulation not published (light red colour indicates deadline for reform not lapsed). OTC derivatives: No regulatory framework in place (dark red colour indicates lapsed deadline for reform). Resolution: Draft rule for external TLAC requirement for G-SIBs not published. Element of resolution regime in the <i>Key Attributes</i> that is not implemented / in place. For the powers columns, none of the three resolution powers for banks (transfer, bail-in and temporary stay) and insurers (transfer, bridge and run-off) are available. Neither recovery nor resolution planning processes are in place for systemic banks. Shadow banking: MMFs – Draft implementation measures not published for valuation, liquidity management and (where applicable) stable NAV. Securitisation – Draft adoption measures not published for implementing an incentive alignment regime and disclosing requirements.
	<ul style="list-style-type: none"> Basel III / resolution: Requirements reported as non-applicable.
C / LC / MNC / NC	<ul style="list-style-type: none"> Basel III: Regulatory Consistency Assessment Program (RCAP) – assessed “compliant” (C), “largely compliant” (LC), “materially non-compliant” (MNC) and “non-compliant” (NC) with Basel III rules. See the RCAP scale.
^	<ul style="list-style-type: none"> Basel III: Risk-based capital column excludes certain technical standards that have come into force in 2017. These are: the standardised approach for counterparty credit risk; capital requirements for central counterparty (CCP) exposures and for equity investments in funds; and the revised Pillar 3 framework.
&	<ul style="list-style-type: none"> Basel III: The US does not identify any additional D-SIBs beyond those designated as G-SIBs. Its framework was found to be broadly aligned with the D-SIB principles. See the RCAP assessment (June 2016).
R / D / F	<ul style="list-style-type: none"> OTC derivatives: Legal barriers to domestic participants’ reporting to trade repositories (TRs) for which cure/mitigant is not available (R); access to domestic TR data by domestic authorities other than primary authority not permitted, or permitted with material conditions (D); direct or indirect access to domestic TR data by foreign authorities not permitted, or permitted only with material conditions (F). See the FSB Thematic Review of OTC Derivatives Trade Reporting (November 2015).
* / **	<ul style="list-style-type: none"> Shadow banking: Implementation is more advanced than the overall rating in one or more / all elements of at least one reform area (MMFs), or in one or more / all sectors of the market (securitisation). The 2017 update was undertaken by IOSCO using the assessment methodology in its 2015 peer reviews in these areas.

<http://www.fsb.org/wp-content/uploads/P030717-3.pdf>

Other Reform Areas (2017)

G20/FSB recommendations	Argentina	Australia	Brazil	Canada	China	France	Germany	Hong Kong SAR	India	Indonesia	Italy	Japan	Korea	Mexico	Netherlands	Russia	Saudi Arabia	Singapore	South Africa	Spain	Switzerland	Turkey	United Kingdom	United States	European Commission
I. Hedge funds																									
1. Registration, appropriate disclosures and oversight of hedge funds																									
2. Establishment of international information sharing framework	N/A	REF	REF	REF	IOG	REF	REF	REF	REF	N/A	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF
3. Enhancing counterparty risk management	N/A	REF	REF	REF	IOG	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF
II. Securitisation																									
4. Strengthening of regulatory and capital framework for monolines																									
5. Strengthening of supervisory requirements or best practices for investment in structured products	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	IOG	REF	N/A	REF	REF	IOG	REF
6. Enhanced disclosure of securitised products	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	IOG	REF	N/A	IOG	REF	REF	REF
III. Enhancing supervision																									
7. Consistent, consolidated supervision and regulation of SIFs	REF	REF	REF	REF	IOG	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	IOG	REF	REF	IOG	REF	REF	REF
8. Establishing supervisory colleges and conducting risk assessments	N/A	N/A	N/A	N/A	REF	REF	REF	N/A	N/A	N/A	REF	N/A	N/A	N/A	REF	N/A	N/A	N/A	N/A	N/A	N/A	N/A	REF	REF	REF
9. Supervisory exchange of information and coordination	REF	REF	REF	REF	IOG	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF
10. Strengthening resources and effective supervision	IOG	IOG	REF	REF	IOG	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF
IV. Building and implementing macroprudential frameworks and tools																									
11. Establishing regulatory framework for macro-prudential oversight	REF	REF	REF	REF	IOG	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF
12. Enhancing system-wide monitoring and the use of macro-prudential instruments	REF	REF	REF	REF	IOG	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF
V. Improving oversight of credit rating agencies (CRAs)																									
13. Enhancing regulation and supervision of CRAs	REF	REF	REF	REF	IOG	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF
14. Reducing the reliance on ratings	REF	IOG	ABN	REF	IOG	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF
VI. Enhancing and aligning accounting standards																									
15. Consistent application of high-quality accounting standards	IOG	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF
VII. Enhancing risk management																									
16. Enhancing guidance to strengthen banks' risk management practices	REF	REF	REF	REF	IOG	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF
17. Enhanced risk disclosures by financial institutions	REF	REF	REF	REF	IOG	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF
VIII. Strengthening deposit insurance																									
18. Strengthening of national deposit insurance arrangements	REF	IOG	IOG	REF	IOG	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF
IX. Safeguarding the integrity and efficiency of financial markets																									
19. Enhancing market integrity and efficiency	REF	REF	REF	REF	N/A	IOG	IOG	REF	REF	N/A	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF
20. Regulation and supervision of commodity markets	REF	REF	REF	REF	REF	IOG	IOG	REF	REF	REF	REF	REF	REF	N/A	IOG	REF	N/A	IOG	IOG	IOG	REF	IOG	IOG	REF	REF
X. Enhancing financial consumer protection																									
22. Enhancing financial consumer protection	REF	REF	REF	REF	IOG	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF	REF

Legend	
Implementation completed	REF
Implementation ongoing	IOG
Applicable but no action envisaged at the moment	ABN
Not applicable	N/A

<http://www.fsb.org/what-we-do/implementation-monitoring/other-areas/>

What has not changed

- **'Mark to market'** unchanged. (Sheila Bair, former Chairman of FDIC)
 - Led to distress selling of assets that aggravated the GFC
- **Repeal of Glass Steagall** and the growing interconnectedness between banks and shadow banks. Volcker Rule is a weak substitute and even that is being constantly diluted.
- **Tax treatment** that favours leverage over equity
- **Inability to control overall leverage.** Banks' money creation ability through fractional banking (SNB's failed *Vollgeld* initiative)
- Inability to control build up of **global imbalances**
- **Regulatory reform being diluted** over time:
 - Timelines repeatedly rolled back
 - Tackling incentives for excessive risk taking has moved away from regulating remuneration to reforming governance.
 - Volcker Rule being repeatedly diluted
 - Trump's call for reviewing the Dodd Frank Act.
- **No change in the rules informing monetary policy** (the Taylor Rule consensus by which central banks respond primarily to output and price changes)
 - Growing evidence that its rules have become blunt
 - financial stability left to macro-prudential policy.

Prospects and Risks Going Forward

- **Is this time Different?**
- **Near Term Risks**
- **Longer term prospects**

Is this time Different ?

Global Growth

	World	AEs	EMDEs
1998-2007	4.1	2.7	5.8
2003-07	4.9	2.7	7.6
1994-03	3.4	2.8	4.4
1980-07	3.5	2.8	4.4
2012-15	3.3	1.5	4.7
2016	3.2	1.7	4.4
2017	3.7	2.3	4.7
2018	3.9	2.3	4.9
2019	3.9	2.2	5.1

- **2003-07 growth boom** mostly an EMDE phenomenon.
- **Growth potential has declined** in both AEs and EMDEs after 2007
- Change in potential GDP has a **critical bearing on macroeconomic, especially monetary, policy**:
 - Labour productivity lower
 - Lower growth in trade and exports
 - Real wage growth weak
 - Inflation and unemployment more or less on target
- Post crisis decline in growth in **AEs**
 - Recovery not V shaped (financial crisis) : permanent loss in output
 - Crisis related (Hysteresis) -- Summers
 - Inequality -- Piketty
 - Demographic – Received wisdom
 - 3% drop in the US labour participation rate has not recovered
- **EMDEs**
 - Pre-crisis growth has resumed after the hubris of the 2003-07 boom
 - Global imbalances – external demand -- driving the boom?

Near term Risks : AEs

- **Buoyancy in asset prices** not commensurate with economic growth, just as in the pre GFC period.
- **Revival of shadow banking**, but bank and non bank credit cycles not synchronous, unlike in 2007
- **Populism** leading to further decline in international trade, and with that productivity and growth.
- **Global imbalances have declined** alongside growth, but except for China, the **major stakeholders have not adjusted**
 - **US CAD decline/savings increase offset by decline in investment**
 - **German and Japanese imbalances have exacerbated. While Germany's imbalances are mostly internal to the Eurozone, they only exacerbate the continuing instability within the zone.**
 - **In these circumstances further increase in growth is likely to increase global imbalances.**
- **High levels of debt constraining monetary policy:** fear that a rise in interest rates could derail the recovery.
- With bloated central bank balance sheets and high levels of public debt there is **little policy space for responding to another financial crisis** in AEs. **Euro area** vulnerable because of small sovereigns and large banks. New ESM of 500 Bn Euros.
- **US FED in tightening mode, but global financial conditions have not tightened** because BOJ and ECB are still at the zero bound and still expanding their balance sheets. Transmission problem.

Near term Risks : EMDEs

- **IMF WEO October 2018:** the world now in “an environment where financial conditions could tighten suddenly and sharply.” Will tightening of financial conditions in AEs spillover to **trigger an EMDE crisis?**
- Historical experience indicates that during ‘sudden stops’ EMDEs undergoing growth crises, high internal (FD) and external (CAD) deficits and external servicing ratios more at risk.
- Serious issues with IMF’s resources (Only \$ 1.4 trillion, of which permanent quotas is only half. Bilateral arrangements and NAB set to expire over the next 2-4 years), nimbleness during a sudden stop, and stigma associated with standby arrangements.
- Better self insured than at the time of the AFC, with more than half of EMDEs now with reserves exceeding 50% of their external financing needs. Asia better self-insured, and with a mutual – but as yet untested -- safety net, the CMIM (\$ 240 Bn)
- EMDE central banks likely to struggle with the ‘impossible trinity’. Need for a new monetary policy tool.
- Domestic debt crisis because of sharp increase in private debt whose servicing is likely to get costlier?

Long Term Prospects?

- Was the GFC just another financial crisis, or **has the world radically changed** since?
- **Ballooning public debt** putting fiat currency at risk?
- The World radically changed **after the Great Depression** – the Keynesian Revolution – but not after the rise of rightwing movements and a devastating War.
- The world radically changed **after the Stagflation of the 1970s**, which was the outcome of runaway fiscal policy:
 - The decline of Keynesianism – felt need to control fiscal deficits
 - Monetary policy took over the pole position from fiscal policy in macroeconomic policy
 - The rise of the ‘neoliberal market economy’ and decline of ‘social democracy’, buttressed by the collapse of socialist economies.
- **A New World Order?**
 - The emerging consensus appears to be that **global finance has not fundamentally changed** despite lower global imbalances and attempts at financial regulatory reform by the G 20 and national governments. The regulatory changes are also untested.
 - **A popular backlash against high finance, lower growth, rising inequality and unemployment** fueling popular discontent and the resurgence of rightwing populism undermining liberal democracies.
 - This threatens to make democracies illiberal as the **contours of a sustainable New Order** are unclear.

Thank you for
your patience