

# Stimulus, Recovery and Exit Policy: G20 Experience and Indian Strategy

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There are large variations among the G20 countries in their deceleration experiences, transmission mechanisms and their current macroeconomic outlook. In an integrated global economy, it is essential that the major economies coordinate their policies. But coordination does not imply simultaneous stimulus withdrawal from all G20 countries. Indeed, a phased withdrawal is probably the best guarantee against the risk of a negative global shock leading to another recession in the event of a simultaneous stimulus withdrawal from all G20 countries. Hence, this paper argues that each country needs to set the timing, scale and composition of its stimulus withdrawal keeping in mind its own macroeconomic outlook.

## 1 Introduction

The prompt, coordinated global response to the Great Recession, even before the group of 20 (G20) had formally emerged as the main platform for global policy coordination in the international financial architecture, was quite remarkable. It prevented the potential transformation of the Great Recession into another protracted global depression like that of 1929. The worst is now over and most economies have turned around, some more and others less. However, G20 policy coordination on policies to exit from the stimulus has been less impressive. Differences remain, especially among the advanced G20 countries, about the timing as well as the scale and composition of policies to wind down their stimulus packages. There are large variations among the G20 countries in their deceleration experiences, transmission mechanisms and their current macroeconomic outlook. Hence, this paper argues that each country needs to set the timing, scale and composition of its stimulus withdrawal keeping in mind its own macroeconomic outlook. In an integrated global economy, it is essential that the major economies coordinate their policies. But coordination does not imply simultaneous stimulus withdrawal from all G20 countries. Indeed, a phased withdrawal is probably the best guarantee against the risk of a negative global shock leading to another recession in the event of a simultaneous stimulus withdrawal from all G20 countries. Section 2 of this paper summarises the varieties of deceleration experience across G20 countries. The key macroeconomic indicators of the G20 are discussed in Section 3 to classify these countries in terms of their readiness for stimulus withdrawal. A stimulus withdrawal strategy for India is then discussed in Section 4. Section 5 concludes.

## 2 Varieties of Deceleration Experience

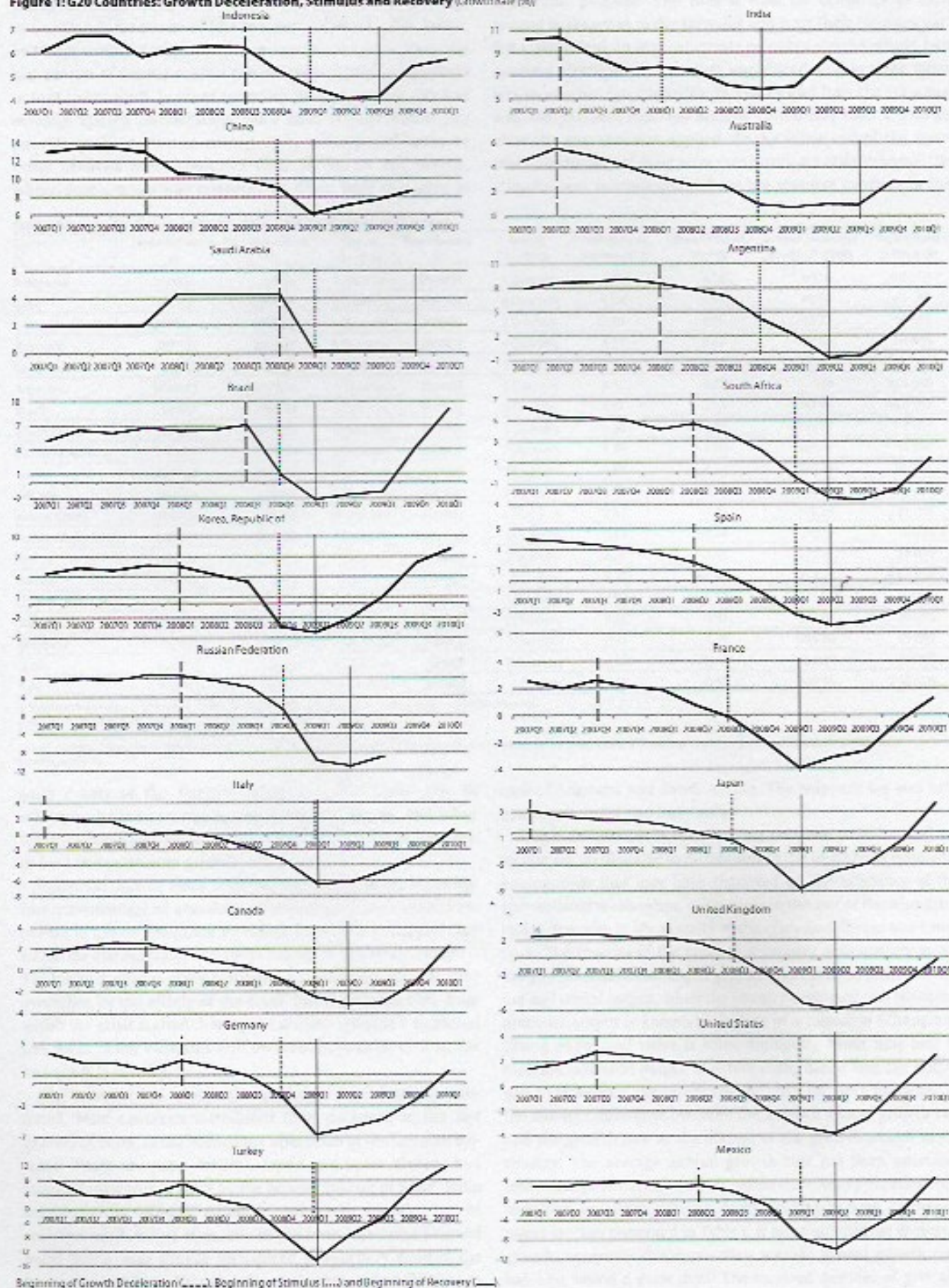
Growth was adversely affected in all G20 countries. However, there were large variations among them in the timing and severity of deceleration; the timing, scale and composition of stimulus packages; and the response lag before they began to turn around. We refer to the "deceleration" experience rather than recession because as many as five out of 20 countries, or 25% of the G20, continued to register positive growth throughout the crisis period, while the others went into recession, in some cases a very deep recession.<sup>1</sup>

The beginning of growth deceleration in each G20 country, the point at which a stimulus package was first introduced (in some cases these were followed by a second or even a third package), and the point at which the country began its recovery after bottoming out have been marked in Figure 1 (p 86), which

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Figure 1: G20 Countries: Growth Deceleration, Stimulus and Recovery (Growth Rate (%))



Beginning of Growth Deceleration (.....), Beginning of Stimulus (---) and Beginning of Recovery (—)

tracks the annualised growth rate for each quarter from 2006Q1 to 2010Q1.<sup>2</sup> Some countries like Indonesia, Saudi Arabia, Brazil, and Argentina did not experience any deceleration until the last quarter of 2008, i.e., after the collapse of Lehman Brothers in September 2008. In other countries the GDP growth rate had actually started decelerating more than a year earlier, by 2007Q2 or Q3.<sup>3</sup> However, among them a distinction has to be made between those countries such as the US and France, where deceleration was triggered by their high exposure to

a stimulus package. The time it took for countries to turn around in response to the stimulus and start their recovery varied a great deal. In nine countries recovery started within two quarters after the stimulus was introduced, and in three quarters in another five countries. In Turkey and Italy the response was sharper, and recovery started within less than a quarter after the stimulus was applied. At the other end of the spectrum, Spain did not start recovering until six quarters after the stimulus was introduced, and the lag was five quarters in the

**Table 1: G20 Countries: Timing and Intensity of Growth Deceleration and Recovery**

Country (%)	Time of Deceleration (2)	Time of First Stimulus (3)	Time Lag (4) = (3)-(2)	Time of Recovery (5)	Time Lag (6) = (5)-(3)	Average Annual Growth Rate <sup>1</sup> (7)	Minimum Growth Rate <sup>2</sup> (8)	Maximum Deceleration (9) = 100[(7)-(8)](%)	Size of Stimulus (in Billions) (10)
Indonesia	2008Q3	2008Q4	1 Quarter	2009Q4	4 Quarters	5.93	4.16	31.16	6.5 US\$
India	2007Q2	2008Q1	3 Quarters	2009Q1	4 Quarters	9.60	5.76	40.57	4.1 US\$
China Mainland	2007Q4	2008Q4	4 Quarters	2009Q2	2 Quarters	11.70	6.30	48.23	196 US\$
Australia	2007Q2	2008Q4	6 Quarters	2009Q4	4 Quarters	3.31	0.87	77.62	52.4 US\$
Saudi Arabia <sup>3</sup>	2008Q4	2008Q4	0 Quarter	2010Q1	5 Quarters	3.77	0.15	96.02	17.5 US\$
Argentina	2008Q3	2008Q4	1 Quarter	2009Q3	3 Quarters	8.55	-0.77	109	36.5 US\$
Brazil	2008Q3	2008Q4	1 Quarter	2009Q2	2 Quarters	4.85	-2.13	143.95	94.8 US\$
South Africa	2008Q2	2009Q1	3 Quarters	2009Q3	2 Quarters	5.36	-2.47	147.77	3.7 US\$
Korea, Republic of	2008Q1	2008Q4	3 Quarters	2009Q2	2 Quarters	4.79	-4.30	189.61	11 US\$
Spain	2007Q2	2008Q2	4 Quarters	2009Q3	5 Quarters	3.83	-4.22	210.27	29 Euro
Canada	2007Q4	2009Q1	5 Quarters	2009Q3	2 Quarters	2.68	3.18	218.52	43.5 US\$
United States	2007Q3	2009Q1	6 Quarters	2009Q3	2 Quarters	2.63	-3.83	245.23	787 US\$
Russian Federation	2008Q1	2008Q4	3 Quarters	2009Q3	3 Quarters	7.44	-10.94	247.11	70 US\$
France	2007Q3	2008Q4	5 Quarters	2009Q2	2 Quarters	2.24	-3.93	275.42	33 US\$
Turkey	2008Q1	2009Q1	4 Quarters	2009Q2	1 Quarter	6.75	-14.45	314.23	9.84 US\$
United Kingdom	2008Q1	2008Q4	3 Quarters	2009Q3	3 Quarters	2.52	-5.90	334.2	30 US\$
Mexico	2008Q2	2009Q1	3 Quarters	2009Q3	2 Quarters	3.68	-9.97	371.03	20 US\$
Germany	2008Q1	2008Q4	3 Quarters	2009Q2	2 Quarters	2.34	-6.70	386.66	29 US\$
Japan	2007Q1	2008Q3	6 Quarters	2009Q2	3 Quarters	2.10	-8.57	508.48	150 US\$
Italy	2007Q3	2009Q1	6 Quarters	2009Q2	1 Quarter	1.55	-6.52	510.56	2.56 US\$

1 - Simple average growth rate based on GDP data from 2004:Q1 to one quarter before the time of deceleration.

2 - Growth rate when the country experienced maximum fall in the GDP growth rate.

3 - Interpolation method has been used to derive the quarterly numbers for Saudi Arabia.

Source: Authors' calculation based on GDP data from IMF, IFS, July 2010. Size and timing of stimulus for each country collected from respective country reports and various press releases (see Appendix A).

early events of the financial crisis, i.e., the sharp rise in sub-prime housing mortgage loan defaults in the US, and those where deceleration was set off by other factors such as the spike in food and petroleum prices.

Collateral data on stock price indices, capital flows, exchange rate movements, and anecdotal information on their limited exposure to the US sub-prime mortgage loan market, suggest that countries like Australia and India belong to this latter category. The initial decline in growth, triggered by other factors, was later overtaken by the effects of the crisis. But the precise time from which the crisis started driving the decline remains a matter of judgment. In our view, this shift occurred in 2008Q4 in Australia and 2008Q3 in India.

The introduction of stimulus packages was closely coordinated. Most countries introduced their packages in the last quarter of 2008, in the immediate aftermath of the Lehman collapse. There are some outliers. Japan and Spain already had stimulus packages in place by the second quarter of 2008. India introduced its "official" stimulus package in 2008Q4. But its real and much larger stimulus, in the form of a large planned fiscal deficit, was already introduced in February 2008 in the budget for 2008-09, though it was not presented at the time as

case of Australia and Saudi Arabia. The response lag was four quarters in India and Indonesia.

These differences in the time lag between stimulus and response are attributable to differences in the underlying economic environment that may have impacted on the efficiency of the transmission mechanism, differences in the size of the stimulus,<sup>4</sup> and differences in the severity of the crisis in different G20 countries. The severity of the crisis in a country is frequently measured by the maximum output gap, the gap between potential output and actual output, when the country bottomed out. However, potential output is known to decline in a recession (Zhang and Zhang 2009) and there is some ambiguity about how best to measure potential output in a recession, hence also the output gap. In this paper, the severity of the crisis has been measured as the absolute difference between the average annual growth rate and the growth rate at the bottom of the growth trough in the country. The average annual growth rate has been estimated from 2004Q1 to the last quarter before the country experienced a sustained, usually monotonic, decline in growth rates. These estimates are also presented in Table 1. It turns out that the decline in growth, compared to the pre-crisis average annual growth rate, has also varied a great deal. The smallest declines of 31% and

