# Discussion comments on "Labour markets in newly integrating economies such as India and China: are they different?"

## Supply constraints, education and the risk of inflation

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#### Introduction

When considering the overall global situation, we conclude that there should not be any inflation, even if the world's monetary policy is very expansionary. The overall global capacity to produce more is in fact very substantial, due to a very high level of investment and to disguised unemployment, particularly in rural areas, which means that there is scope to increase the labour force significantly. In this situation of excess global supply of goods and labour, monetary expansion is leading to a rise in asset prices, not in prices of goods — of course with the exception of commodities. Nevertheless, inflation is appearing in some countries, for example China, Hungary, India, Romania, Russia and Turkey, as these countries are characterised by rapid growth in liquidity, and therefore in domestic demand.

Professor Tendulkar's paper focuses on the differences between the way the labour markets function in India and China. We follow a similar approach.

If current inflation is not a result of the recent rises in commodity prices, it can only be explained by rigidity in the supply of goods and services, despite its apparent abundance.

This rigidity can be explained by a shortfall in investment; problems related to education; problems of sectoral specialisation which does not match demand; and insufficient international mobility of goods and services.

We find that these problems are specific to the above-mentioned countries, and there is no reason to conclude that global inflation is reappearing.

# 1. Apart from the effect of commodity prices, there is no global inflation

It is sometimes argued that global inflation is reappearing. This argument is based on inflation rates in a few countries, which we analyse below. However, the world economic situation seems to exclude a comeback by inflation, apart from that resulting from the recent rise in commodity prices. World inflation is currently fluctuating at around 3%, and world core inflation at around 1½%.

Global underlying inflation is actually muted, which can be explained by:

- the rapid growth in global investment and the increase in the world investment rate (from 22% in 2002 to 27% currently). The increase in the world saving rate driving this rise in the global investment rate is linked to the global transfer of income towards regions where the saving rate is high (China, other emerging Asian countries, oil-exporting countries, etc);
- the very high level of disguised unemployment in the world, particularly in rural regions in emerging countries, which is shown by the low global employment rate

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(45% vs 64% in OECD countries). This means that there is scope to increase employment without difficulty, thanks to migration from the countryside into cities.

We are therefore in a global situation of excess supply in both goods and labour markets, which in theory does explain the lack of underlying inflation mentioned above, as well as the low level of wage rises compared with productivity gains (2½% vs 4%).

Against this backdrop, the effect of the expansionary monetary policy being conducted worldwide (as shown by trends in the global monetary base, the relative level of the interest rate and the growth rate) is to boost credit and demand, and therefore growth, but without any effect on inflation since there is excess supply. The consequence is a rise in asset prices (in turn equities, real estate and bonds).

It is therefore surprising that there has been talk of a comeback by inflation, and also that high inflation rates are being witnessed in certain countries, since the current world economic situation implies that inflation will not pick up, apart from with the effect of commodity prices.

#### High inflation rates in certain countries

While inflation is low worldwide, it is high in certain countries. This is not the case in the large OECD countries, where inflation is only accounted for by commodity prices, but it is the case in China, Hungary, India, Romania, Russia and Turkey. Inflation is around 6% in China, 8% in India, 6% in Hong Kong SAR, 10% in Russia, 11% in Turkey, 9% in Romania and 7% in Hungary.

We obviously cannot cover all countries, but we will look at the causes of inflation in a few important countries, ie China, India, Romania, Russia and Turkey.

#### What can cause inflation in a country if there is no global inflation?

If there is no global inflation, and if inflation in a country is not explained by commodity prices, it can only result from a particular rigidity in the supply of goods and services (or labour, causing rigidity in the supply of goods) in this country.

There are several possible explanations for rigidity in the supply of goods and services:

- a shortfall in investment;
- problems related to education;
- a sectoral specialisation which does not match demand.

These factors cause a rigidity in the supply of goods if there is insufficient international mobility of goods and services. If the supply of goods and services is rigid, a sharp increase in domestic demand will lead to inflation, even if there is excess supply at worldwide level.

It is interesting to see that the five countries analysed here as examples of countries with high inflation have recently seen a sharp increase in domestic demand, except in the most recent period in Turkey, as well as in liquidity and in credit.

Credit expanded by 15 to 25% in 2007 in China, India, Russia and Turkey, and by 60% in Romania. So when brisk domestic demand comes up against inelastic supply in these countries, inflation is the result.

We will look at the five countries from this point of view, but we can immediately eliminate the case of China from our core analysis, retaining it as a reference for our analysis of the other four countries. Inflation in China is in fact due only to food prices, not to increases in the prices of other products; the country's core inflation figure is under 1%. One therefore cannot attribute it to rigidity in supply. Thus the question we need to ask is: what can we see in the other countries (and in China by comparison)?

## 2. Investment and savings

Rigidity in supply can be shown by the presence of an external deficit (ex energy). It can result from a shortfall in productive investment or (and) productivity gains. The investment rate is low in Russia, and falling in Turkey. India, Romania and Turkey have very substantial trade deficits, while Russia's surplus of course is explained by energy exports. Productivity gains are quite low in Turkey. There is therefore quite clearly a shortfall in investment used to meet domestic demand in all four countries.

#### 3. Problems related to education

This is the central point raised by Professor Tendulkar. An insufficient level of education among a large section of the population in an emerging country prevents any noticeable transfer of the labour force from agriculture into industry and services, and can therefore lead to a situation of shortfall in supply.

Even if a considerable proportion of the population has an advanced level of education, but the rest of the population has little, the only possible growth strategy (ie to develop a few sophisticated sectors) will not allow the economy to meet domestic demand, hence the appearance of inflation.

The illiteracy rate is high and the level of education low in Turkey and especially in India (nonetheless, there is a guite large, highly skilled elite; see Tables 1A, 1B and 1C).

Employment is not growing very fast in these countries, except in China; migration from the countryside into cities is boosting the labour force in China and to a lesser degree in Turkey, but not in Russia or Romania. The problems related to labour resources therefore seem to be present in India, Romania, Russia and Turkey.

Table 1A Illiteracy rate

As a percentage of the population aged 15 and over, 2005

China	India	Romania	Russia	Turkey	
9.1	39.0	2.7	0.6	12.6	

Source: World Bank.

Table	1	В
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#### Percentage of upper secondary graduates in the population aged 25 to 64

	2004	2005
China	15	
Russia	89	89
Turkey	26	27

#### Percentage of tertiary graduates in the population aged 25 to 64

	2003	2005
China	1	
Russia	54	55
Turkey	10	10

### Percentage of upper secondary graduates in the population at the typical age of graduation

	2003	2004	2005
China	31		
India	21	****	•••
Russia	77	****	•••
Turkey	41	55	48

#### Percentage of tertiary graduates in the population at the typical age of graduation

	2003	2004	2005
Turkey	10.5	10.8	11.2

Source: OECD, Education at a Glance (2005, 2006, 2007).

Table 1C

#### **Enrolment rates**

Gross, in per cent

	China			India			Romania		
	Primary	Second- ary	Tertiary	Primary	Second- ary	Tertiary	Primary	Second- ary	Tertiary
2000		62.9	7.6	98.8	47.9	10.2	102.5	80.6	24.1
2001	117.7	65.1	9.8	98.3	48.0	10.5	99.4	82.9	28.5
2002	116.0	67.2	12.6	99.0	49.8	11.0	98.9	84.8	31.8
2003	115.0	70.3	15.4	107.4	52.3	11.5	100.2	85.3	36.3
2004	117.6	72.5	19.1	116.2	53.5	11.8	106.5	85.1	40.2
2005	112.8	74.3	20.3	119.3	56.6	11.4	106.9	85.3	44.8

	Russia			Turkey			
	Primary	Secondary	Tertiary	Primary	Secondary	Tertiary	
2000				96.3		23.2	
2001	107.5			97.7	77.8	23.3	
2002	112.5	93.1		99.3	81.5	24.4	
2003	117.5	93.0	65.2	94.7	85.3	28.0	
2004	122.9	93.0	68.2	93.3	79.2	29.0	
2005	128.7	91.9	71.0	93.3	75.3	31.2	

Source: World Bank.

# 4. Productive specialisation

This issue is similar to the problems related to education. If the (sectoral) productive specialisation of the economy is such that supply does not match demand, in terms of products, the result is a shortfall in the supply of certain goods, and hence an inflationary risk if the international mobility of goods is not sufficiently large to let imports totally replace domestic supply. Of course, if there was perfect international mobility of goods, a shortfall or inadequacy in domestic supply would have no effect.

Table 2
Structure of added value

As a percentage of GDP

# Added value in agriculture As a percentage of GDP

	China	India	Romania	Russia	Turkey
1999	16.5	25.0	15.2	7.3	12.7
2000	15.1	23.4	12.5	6.4	14.9
2001	14.4	23.2	15.0	6.6	9.3
2002	13.7	20.9	13.1	6.7	12.0
2003	12.8	20.9	13.1	6.8	12.8
2004	13.4	18.8	14.7	6.1	12.6
2005	12.5	18.3	10.1	5.5	11.7
2006	11.7	17.5	9.1	4.9	11.3
2007	11.0	16.6	8.6	4.6	10.9

# Added value in industry As a percentage of GDP

	China	India	Romania	Russia	Turkey
1999	45.8	25.3	33.9	24.9	28.9
2000	45.9	26.2	34.1	24.8	28.5
2001	45.2	25.3	34.6	20.9	30.9
2002	44.8	26.4	39.0	32.9	29.5
2003	46.0	26.1	38.5	27.7	28.4
2004	46.2	27.5	37.5	37.3	28.6
2005	47.5	27.6	35.0	39.4	29.9
2006	48.9	27.9	34.9	39.3	29.5
2007	49.0	28.4	35.5	39.1	29.5

#### Added value in service

As a percentage of GDP

	China	India	Romania	Russia	Turkey		
1999	37.8	49.7	51.0	54.8	58.4		
2000	39.0	50.5	53.4	55.0	56.6		
2001	40.5	51.5	50.4	56.9	59.8		
2002	41.5	52.7	48.8	59.6	58.5		
2003	41.2	52.9	49.8	59.7	58.8		
2004	40.4	53.7	49.1	56.5	58.8		
2005	39.9	54.1	54.9	55.0	58.4		
2006	39.3	54.6	56.0	55.8	59.2		
2007	40.0	55.0	55.9	56.3	59.6		

Source: Economist Intelligence Unit.

India and Turkey specialise in services, as shown by their trade balance: the surplus on services amounts to 4% of GDP in both these countries. The weight of industry in GDP is low in India and Turkey (Table 2). Tables 3A to 3E show the relatively low weight of factory employment in these two economies (if the weight of agriculture is taken into account). One can therefore understand why there is excess demand for manufactured products in these countries.

Table 3A Russia: employment by sector

As a percentage of total employment

	1999	2000	2001	2002	2003	2004
Agriculture	13.7	13.4	12.7	12.2	11.4	10.8
Industry	22.4	22.6	22.7	22.2	21.8	21.5
Construction	7.9	7.8	7.8	7.6	7.7	7.9
Transport and telecom	7.7	7.8	7.7	7.7	7.8	8.0
Trade	14.6	14.6	15.4	16.6	16.8	17.2
Construction + services	64.0	64.0	64.6	65.6	66.8	67.7

Source: Vienna Institute for International Economic Studies (WIIW).

Table 3B China: employment by sector

As a percentage of total employment

	1999	2000	2001	2002	2003	2004	2005	2006
Agriculture	50.1	50.0	50.0	50.0	49.1	46.9	44.8	42.6
Industry	23.0	22.5	22.3	21.4	21.6	22.5	23.8	25.2
Services	26.9	27.5	27.7	28.6	29.3	30.6	31.3	32.2

Source: Ministry of Labour and Social Security.

Table 3C

Romania: employment by sector

As a percentage of total employment

	1999	2000	2001	2002	2003	2004
Agriculture	41.2	41.4	40.9	36.2	34.7	32.0
Manufacturing	20.6	19.6	20.0	22.0	21.6	21.8
Total industry	24.4	23.2	23.6	25.5	24.8	24.9
Construction	4.0	4.1	4.0	4.4	4.8	5.1
Services	30.4	31.3	31.6	33.9	35.7	38.0
Construction + services	34.4	35.3	35.5	38.3	40.4	43.1

Source: WIIW.

Table 3D

Turkey: employment by sector

As a percentage of total employment

	2000	2001	2002	2003	2004	2005	2006
Agriculture	38.7	39.4	37.1	36.6	36.5	32.4	29.1
Industry	18.6	18.7	19.0	18.5	18.8	19.0	19.4
Construction	5.9	4.9	4.9	4.9	4.8	5.7	5.8
Services	36.8	36.9	39.0	40.0	39.9	42.9	45.6

Source: IMF.

Table 3E India (urban): employment by sector

As a percentage of total employment

	1999	2000	2001	2002	2003	2004	2005	2006
Agriculture	5.7	6.0	6.0	6.0	5.3	5.1	4.8	4.6
Industry	27.6	27.2	26.7	26.1	25.7	25.5	25.4	25.2
Services	66.7	67.0	67.4	68.3	69.0	69.4	69.9	70.2

Source: Ministry of Labour and Social Security.

## 5. Conclusion: no comeback of global inflation

The global macroeconomic situation rules out a resurgence of global inflation: there is excess supply of goods (due to the high level of investment) and of labour (with the rural labour reserves of emerging countries). In this situation of across the board excess supply, the expansionary global monetary policy being pursued is driving asset prices upwards, but not goods prices.

We can, however, see a rise in commodity prices in this situation, due to the pace of global growth and the limited supply of many commodities, but this is nothing that would cause a rise in global underlying inflation. Nevertheless, we can currently see inflation that is not caused by commodity prices in several large emerging countries: India, Romania, Russia and Turkey (but not China, where inflation is accounted for by food prices). These countries are also characterised by rapid growth in credit and domestic demand.

We have shown that this inflation is a result of causes that are specific to these countries: the supply of goods and services is rigid or ill adapted to rapidly growing demand, either because of a shortfall in investment (in all four countries), or due to insufficient education of the population, which hampers the creation of the jobs that would make it possible to meet demand (in all four countries), or due to a sectoral structure of production that is out of step with the structure of demand (in India and Turkey); all this in a situation of imperfect international mobility of goods with regard to these countries.

There is therefore no overall inflation, but what we are seeing is specific episodes of inflation in countries where supply is insufficient or ill adapted, ie countries not in a position to benefit from the global situation of excess supply. The comparison between China and India is very instructive. Underlying inflation is muted in China, but significant in India, and this can be attributed to the situation with regard to education and, consequently, productive specialisation.

China has a population that is reasonably well educated, with a low proportion of individuals that are very well educated. It has therefore chosen a growth strategy based on mass industrialisation and the related massive migrations from the countryside to the cities, which is logical given its circumstances.

India has a high proportion of individuals with a high level of education compared with the average of the population, but the bulk of the population has a very low level of education. It has therefore chosen a growth strategy based on certain sophisticated services, but with low industrialisation and internal migration.

China therefore generates a supply of goods that matches domestic demand, hence the lack of inflation. In contrast, India generates a supply of advanced services, above all intended for the export market, and consequently cannot meet domestic demand, thus explaining its inflation experience.