

Inflation and monetization of the economy

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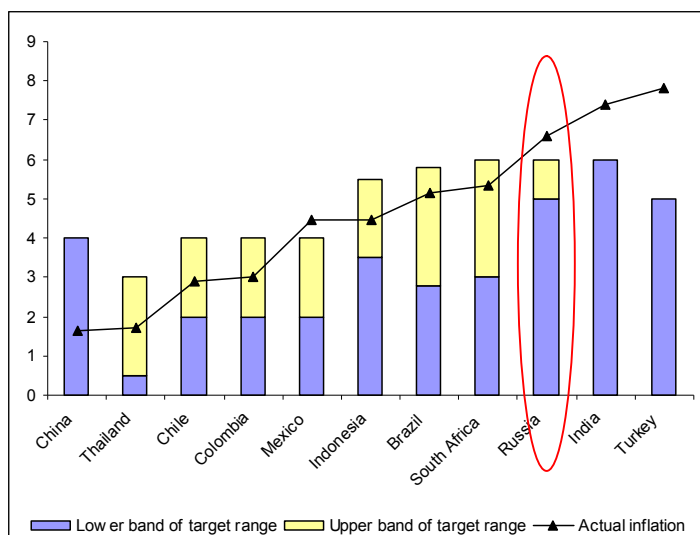
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Inflation in 2012: acceleration with a long-standing downward trend

The tendency of lowering inflation emerged in Russia and abroad ever since the 2008–2010 crisis. In January 2013, the World Bank was pleased to note that “globally, inflation is broadly under control, with consumer prices rising at a 3.9 percent annualized rate at the end of 2012.”¹ Specifically, emerging economies see inflation slowing down: under 6% in almost 80% of the developing countries, while most middle-income countries have inflation within the targeting range.² Nevertheless, some countries (including Russia) witness a different situation (Fig. 1).

Fig. 1. Planned and actual inflation in certain emerging economies (%)



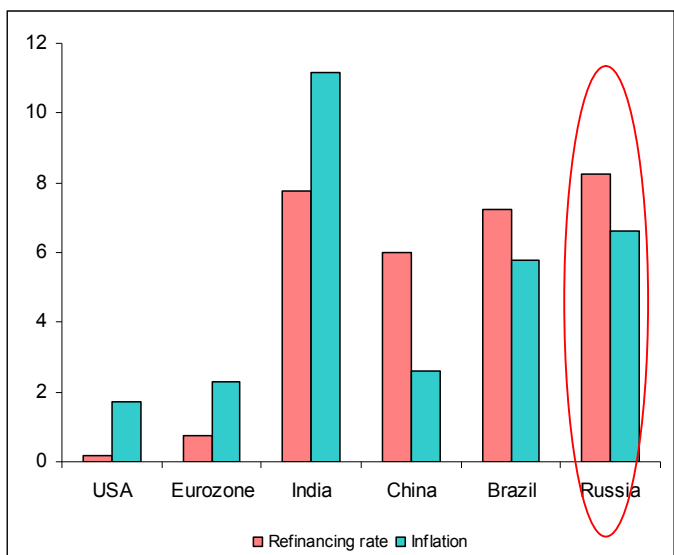
Source: World Bank, January 2013

¹ World Bank, January 2013.

² Ibid.

At the same time, whereas refinancing rates have recently been stable at a level considerably lower than inflation in mature economies, refinancing rates in many emerging economies (including Russia) have been higher than inflation by contrast, which generally means a more restrictive policy and fails to lead to increasing the availability of resources that are necessary for economic participants (Fig. 2).

Fig. 2. Inflation* and refinancing rates in certain countries (2012, %)

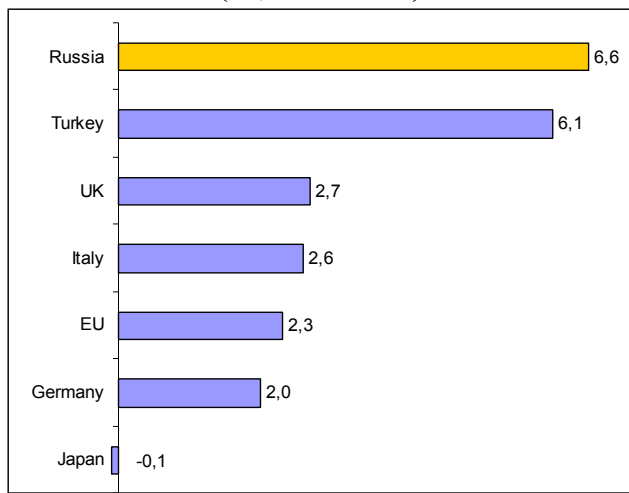


* Dec. 2012/Dec. 2011

Source: Central banks of the relevant countries

On the whole, Russian regulators have not been able yet to keep down the prices that showed noticeable acceleration in 2012; moreover, Russia has **higher inflation than several other countries** (Fig. 3).

Fig. 3. Inflation (CPI) in Russia and foreign economies in 2012 (% , Dec. /Dec.)



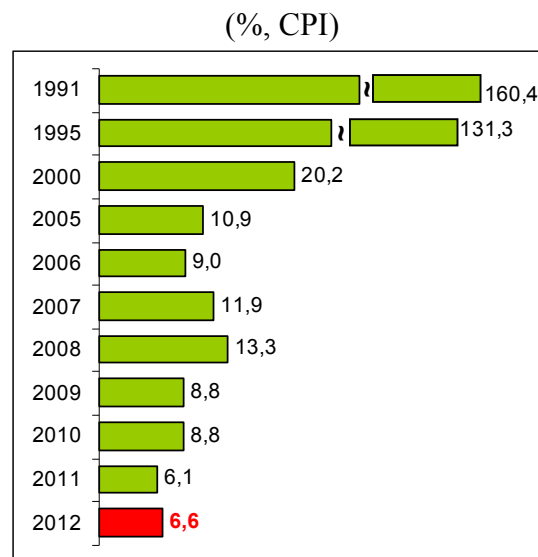
Source: Russian Federal Service for State Statistics

At the same time, Russia has managed to keep inflation at a low level (compared with the pre-crisis period), among other things because some previous inflationary factors (for example, crude oil prices) have lost their importance.³ Additionally, lower inflation was due to the decreased growth rates of export revenues, net exports, and to **net outflow of private capital** (almost USD 60 bln in 2012).

As is known, the growing crude oil prices and capital inflows before the 2008 crisis were important factors in high inflation at the time (about 10% or more a year). For instance, the World Bank’s Report (April 2005) said that additional capital inflows at the time “are also increasing pressure on inflation and the real exchange rate.”⁴

However, the current inflation rate is the lowest in the country’s recent history (Fig. 4).

Fig. 4. Inflation in Russia in 1991–2012



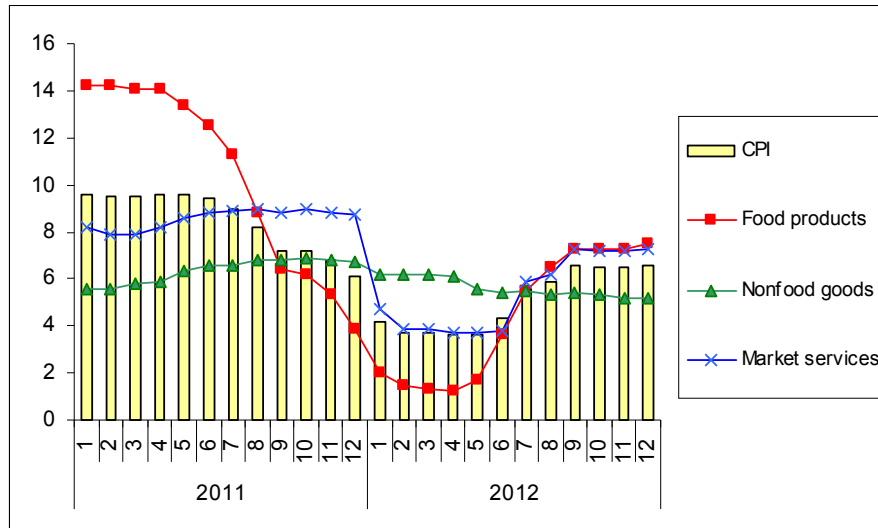
Source: Russian Federal Service for State Statistics

It is noteworthy that, in certain periods, inflation rates can go up, which is naturally a cause for concern among market players and regulators and leads to an undesirable rise in inflationary expectations among all market participants. Specifically, this happened in the **summer of 2012**, when consumer prices grew due to activities of natural and other monopolies and to higher prices of grain and food in general (e.g. because of a bad harvest). The downward trend in inflationary developments that had continued for about a year changed into an **opposite** one (Fig. 5).

³ The high growth rates of crude oil prices decreased substantially due to unfavorable trends in European and other economies, which are the leading importers of raw commodities (the crude oil price in 2012 was USD 111/bbl, remaining at the 2011 level approximately).

⁴ Worldbank.org

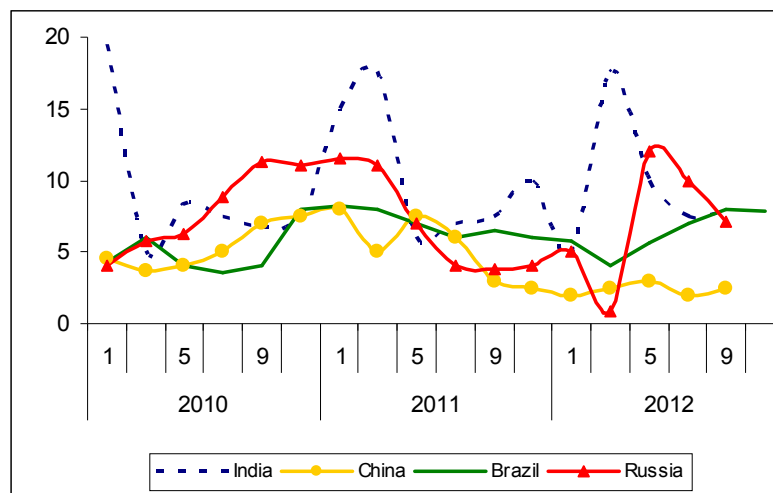
Fig. 5. Inflation (CPI) and price growth for foods, nonfoods, and services in Russia* (%)



* y-o-y
Source: Bank of Russia

At the same time, it is worth mentioning that Russian inflation contains a certain global component reflecting foreign trends that affect trends in Russia. For instance, inflation surged in some BRIC countries in 2012: somewhat earlier in India and, by contrast, somewhat later in China than in Russia (Fig. 6).

Fig. 6. BRIC countries: seasonally adjusted annualized inflation rate * (%)



* for three months against the corresponding three months in the previous year

Source: World Bank, January 2013

Intensifying nonmonetary nature of inflationary developments

In order to make an objective evaluation of the origins of Russia's contemporary inflation, it is necessary to recall different types of inflation in brief and what underlies them.

1. Demand-pull inflation is caused by:

- an increase in income related to a positive balance of payments;
- a rise in government spending;
- a growth in private spending, specifically, due to a rapid increase in bank lending.

2. Structural inflation: a rise in the overall price level due to the existence of natural and other monopolies and to administrative price regulation by federal or regional authorities.

3. Cost-push inflation: inflation caused by a rise in production costs due to increases in wages, adverse weather conditions, etc.

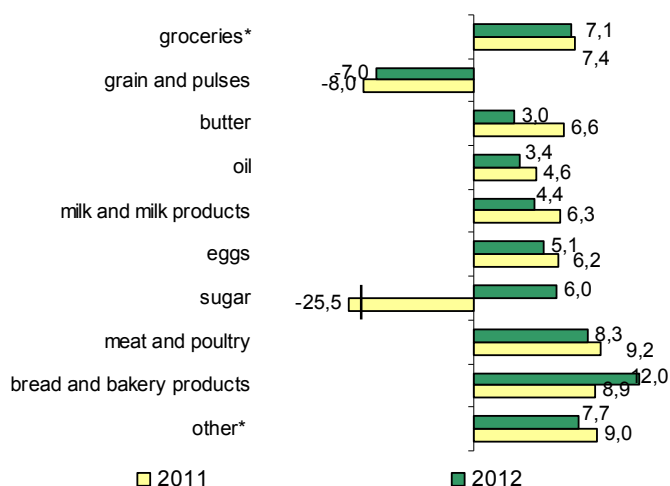
4. Imported inflation: inflation resulting from higher prices of imports and other foreign trade factors.

5. Anticipated inflation takes place when certain entities in anticipation of price increases form so-called "pro-active demand", raise their product prices, etc.

The particularity of the contemporary stage is that Russia witnesses the simultaneous existence of all major inflation types. And structural, imported, and cost-push inflation started to play a more important role in the summer of 2012. A whole range of reasons triggered a rise in consumer prices at the time. First, an increase in regulated tariffs (for utility services and municipal transportation services) was postponed federally and locally from the beginning of the year to the summer of 2012. Second, food prices went up (both due to a rise in grain prices and other foods abroad and due to a decline in agricultural production largely because of the weather factor, namely a bad harvest caused by dry weather).

It is of note that the prices for certain food products show slower growth rates. Exceptions are bread, bakery products, sugar, and fruit and vegetables (Fig. 7); they contributed to **a more important role of foods in inflation in 2012** against 2011 (Fig. 8).

Fig. 7. Price growth of staple foods in 2011 and 2012 in Russia, price increase (decrease), % Dec./Dec.



* excluding fruit and vegetables

Source: Ministry of Economic Development

Fig. 8. Contributions of major groups of goods and services to inflation during the year in Russia (percentage points)



Source: Russian Federal Service for State Statistics

These food price increases caused by both negative trends in Russian agriculture and inflationary developments in the foreign food industry were a major contributor to **a more important role of nonmonetary factors in Russian inflationary developments**. Overall, nonmonetary factors made an **increased** contribution to inflation (Table 1), from 20% in 2011 to 36% in 2012, i.e. near the 2005 level (37%)⁵.

Table 1. Inflation and contribution of monetary and nonmonetary factors to it in 2005, 2011, and 2012, Russia

	2005	2011	2012
CPI	10.9	6.1	6.6
1. Monetary factors	6.9	4.9	4.2
2. Nonmonetary factors	4.0	1.2	2.4

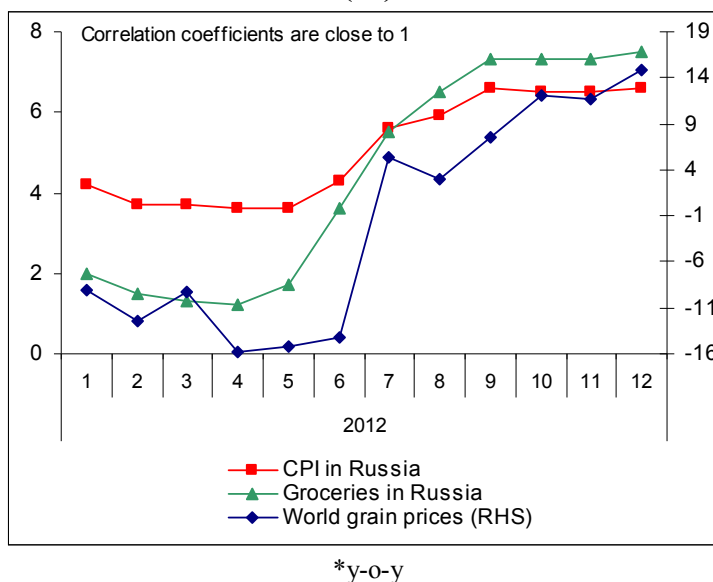
Source: calculated using estimates of the Ministry of Economic Development

It is to be recalled that monetary factors are factors associated with monetary policy. Primarily, these include changes in monetary aggregates and exchange rates. In the period under review, nonmonetary factors primarily include a rise in the prices for services produced by natural and other monopolies and the prices for agricultural products. In this case, a more important role of nonmonetary factors proves the above words about the increased importance of such inflation types as structural inflation, cost-push inflation, and imported inflation. For

⁵ Calculated as per Table 1.

instance, in general, Russian food prices and inflation correlate both with each other and with world grain prices (with correlation coefficients being close to 1 (Fig. 9)).

Fig. 9. Growth rates of consumer prices and food prices in Russia and world grain prices* (%)



Sources: Bank of Russia, Food and Agriculture Organization

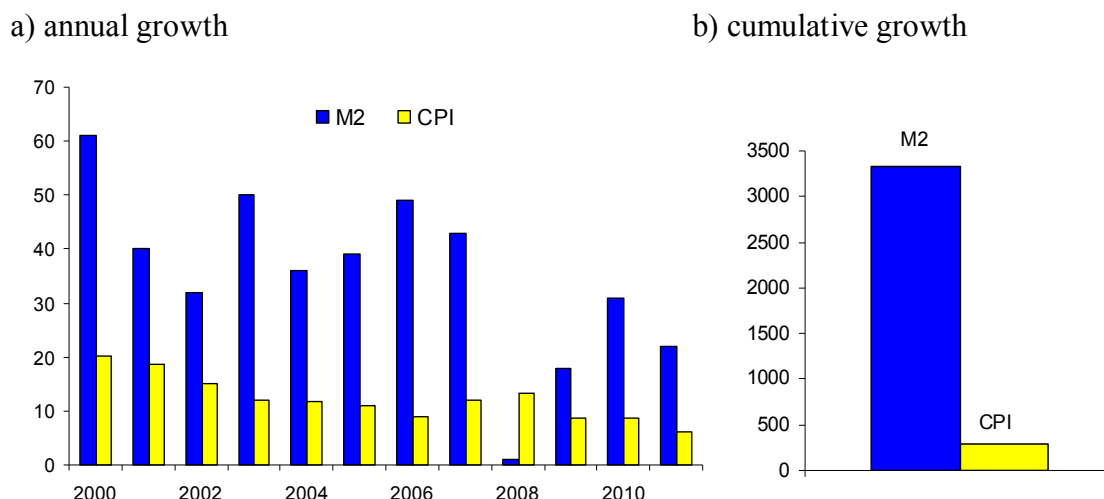
About inflation and monetization

According to the approved text of the monetary policy of the Bank of Russia, its top priority is to ‘ensure price stability, i.e. keep price growth rates consistently low’.⁶ Inflation is, indeed, planned to stay at 4-6% in 2013 (forecast by the Bank of Russia and the Ministry of Economic development, November 2012–January 2013), which implies a further inflation reduction trend that started in 1998. In such context, the economy is supposed to attain *sustainable* growth rates, which will require appropriate financing and might lead to a price growth. Are these tasks compatible with each other? The rouble monetary base (i.e. rouble creation) is assumed, among other things, to grow at rates about 10%, which, subject to the multiplier effect, may result in an almost 19% growth of the money supply. In other words, getting more money into the economy is not expected to result in a proportional increase in prices.

We would note that the above trend of prices lagging behind the liquidity growth has been observed in the Russian economy for more than 10 years! (Fig. 10a)

⁶ “Guidelines for the Single State Monetary Policy in 2013 and for 2014 and 2015” / Bank of Russia. P. 3

Fig. 10 Money supply growth and inflation (CPI) in Russia in 2000-2011, %



Source: Bank of Russia

It would seem that additional **liquidity** growth should ‘spur on’ price growth. This doesn’t happen however in our case, and for a quite long while. Moreover, the resulting difference between these indicators is quite significant (*for more information see ershovm.ru*) (Fig. 10b).

We did forecast such scenario 12 years ago. Among other things, we highlighted that due to low monetization the Russian economy ‘showed itself capable of absorbing additional rouble resources with zero inflation’.⁷ In this connection, we concluded that ‘non-monetized operations ... may, to a significant extent, contribute to a successful expansion of the capital base of the economy’.⁸ Such conclusions and forecasts were justified given the ‘monetary collapse’ that took place in the first half of the 1990s’ when price growth rates outpaced the growth of money supply by a factor of 10, which, led to its (i.e. money supply) reduction by the same magnitude! (Fig. 11, 12).

⁷ Ershov M.V. Monetary and Financial Mechanisms in the Today’s World: Crisis Experience of Late 90s. Moscow. Ekonomika. 2000. P. 318

⁸ Idem P. 317-318

Fig. 11 Consumer price indices and M2 in 1992-1996 (1992 = 1) in Russia

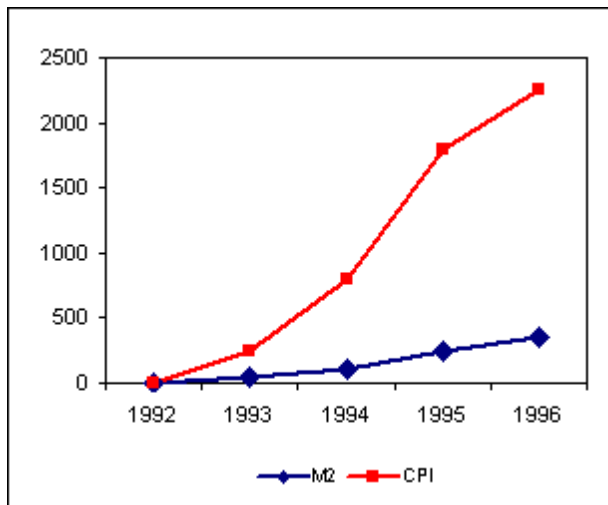
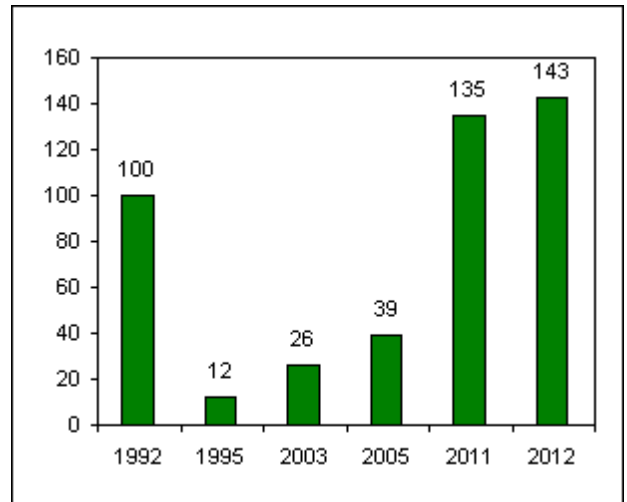


Fig. 12 Real money supply growth in 1992-2012 (1992 =100%) in Russia



Source: calculated based on data by the Russian State Statistics Service

Such ‘monetary shock’ quite naturally resulted in non-payments, barter, surrogates and other ‘quasi-money’ that the economy could use to compensate the emerging misbalances. It was evident that inflation implications from money growth in such circumstances would be limited. ‘Money contraction’ led to a decrease in both bank capitalization and monetization of the economy on the whole, which have grown in the recent years, but are still low and may substantially constrain the economic growth potential.

Note

The extent of collapse of the real M2 in Russia also shows that this problem has one more dimension, a geopolitical one. It pertains to the sources of monetization which will occur. If we assume (for the sake of argument) that the main channels of liquidity for Russia will be some foreign sources, then this may imply that the foreign owners of these resources will have a crucial role in money supply which will eventually take shape and, subsequently, will be able to set course and priorities for the development of the country. All this shows the importance of national monetary authorities which have to play the dominant role in forming the financial basis of the Russian economy and in its monetization.

About monetary factors and time lags

Although time lags between money supply growth and price increases are not clearly seen graphically, a more focused analysis shows that M2 growth can impact inflation **with a time lag of as many as several months** or sometimes even 6–8 months.⁹

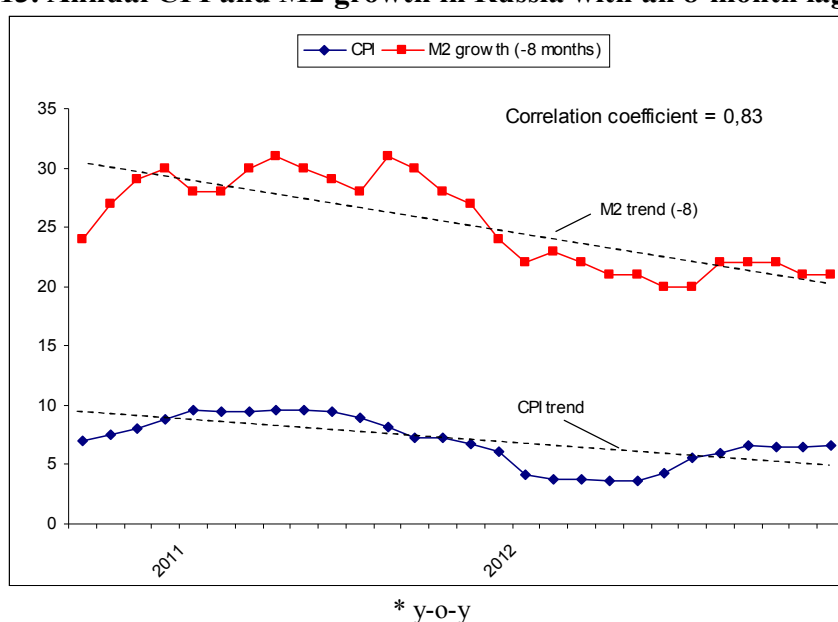
⁹ See, for example, OECD ECONOMIC SURVEYS: Russian Federation, 2009, pp. 94–95.

Indeed, calculations show that this time lag may exist (see below) but it does not provide a complete explanation for the correlation between M2 changes and inflation.¹⁰ Our correlation analysis using a time lag made it possible to say in the pre-crisis period that the correlation between M2 and the CPI had a time lag of about 4–5 quarters (Table 2). The existence of this lag was described by Milton Friedman in his early publications.¹¹ He also noted that it was possible that, in certain periods, the lag would be longer and, in other periods, shorter.¹² For instance, a time lag of 8 months was more clearly seen in 2011–2012 (Fig. 13).

Table 2. M2 and CPI correlation coefficients in Russia (by month, on an annualized basis)¹³

	2007	2008	2009
12-month lag	0.87	0.71	0.91
16-month lag	0.85	0.67	0.89

Fig. 13. Annual CPI and M2 growth in Russia with an 8-month lag* (%)



Source: Bank of Russia

Another monetary factor, the **exchange rate**, should impact consumer prices in certain periods of time. It is common knowledge that currency depreciation leads to higher prices of

¹⁰ For instance, a longer time lag existed before the crisis (1 year and above).

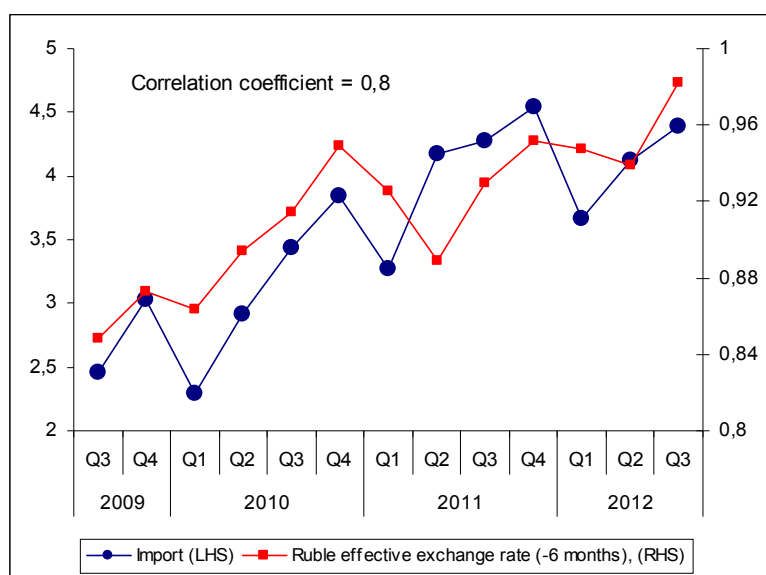
¹¹ Friedman, Milton. "The Lag in Effect of Monetary Policy." *The Journal of Political Economy*, 1961, 69(5), pp. 447-66.

¹² Friedman, Milton. *If Money Could Speak*, Moscow, Academy of National Economy, 1998, p. 112.

¹³ For a lag of 4–5 quarters, see "Rosbank Center for Strategic Analysis: Inflation amid the Crisis." *ABZh, Issue 3*, p. 28. Additionally, a long lag (5 quarters) in 2006–2011 was discovered by P. Badasen; see *Inflationary Developments in Russia (materials for the Realistic Simulation seminar)*, Moscow, Federation Council, 2012, p. 30.

imports and, even, higher prices of exports in the **local currency** [highlighted in bold type by us] (among other things due to increased prices of imported components, etc.).¹⁴ Although the existence of this correlation in Russia in the longer term is not clearly seen (e.g. because many foreign trade contracts are of a long-term nature and sluggishly respond to current changes in the exchange rate), this correlation began to manifest itself after the crisis (Fig. 14).

Fig. 14. Price growth index of imports in rubles and effective exchange rate index of the ruble in Russia with a 6-month lag in 2009–2012 (year 2004 = 1)*



* a rise in the effective exchange rate index of the ruble means the strengthening of the ruble against foreign currencies

Source: Bank of Russia, Russian Federal Service for State Statistics

All of the specific characteristics listed above show the diversity of inflationary developments in the contemporary world, making it necessary to investigate inflation problems and anti-inflationary measures on a comprehensive basis (given an increasingly large contribution of nonmonetary factors, it is necessary to avoid shifting the excessive emphasis to the restrictive monetary policy). In this connection, the occurrence of the official inflation forecast (5–6% in 2013) can be brought into question not only in the current year but also in the near years (annual inflation is officially forecasted to be 4–5% in 2014–2015). It is possible that this forecast inflation target will be exceeded even though the Russian Government and the Bank of Russia work hard to bring down inflation. Bearing in mind that the prices are more elastic in the upward trend and more sticky downwards, it appears that inflation in the near years may reach about 6–8%.

¹⁴ However, these prices of exports are generally increased by a smaller amount than the currency depreciation amount, which ultimately means cheaper exports in **foreign currency**.

About anti-inflationary policy

One of the sources of inflation is public spending, which was on the rise in absolute and relative terms throughout the previous year. At the same time, given external risks, it is necessary to avoid any sharp decrease in domestic demand. Among anti-inflationary measures, it is also desirable to raise the importance of an efficient tax policy (e.g. improving tax collectability).

We should also consider that the efficiency of the restrictive monetary policy was limited, among other things due to lack of adequate account of nonmonetary factors and because there were no timely measures to control them (for example, in the food industry). Additionally, one should not disregard that the restrictive monetary policy has high costs, because this policy impairs the investment potential and decreases the banking system's available resources.

In fighting inflation, there is a risk that the emphasis will be shifted solely to the restrictive monetary policy, which **may expose the economy and the banking sector to new risks:**

- curbing the growth of monetary aggregates decreases the resources available to the banking system and to the entire economy;
- higher borrowing costs prevent economic growth and may contribute to the occurrence of local, regional, and, perhaps, crisis events of systemic nature in the economy;
- excessive monetary restrictions may affect the implementation of social programs, which will eventually constrain consumer demand. In addition, insufficiently controlled nonmonetary factors may result in the growth of this inflation component and lead to price increases in general.

With this in mind, bringing down demand-pull inflation could be facilitated by effective measures to encourage the **supply-side economics**. A rise in **aggregate supply**¹⁵ requires that additional measures should be taken to create a competitive environment for business and to raise capital investment. Specifically, an increase in savings in recent years provides the foundations for their more complete transformation into investment and their redistribution via the lending system toward Russia's economic bottlenecks. In this connection, a top priority is to implement measures to raise supply, including supply of agricultural products, because trends in the food industry were one of noticeable inflationary factors in 2012. The monetary policy should also be supplemented with measures to replace external borrowings by domestic loans (which means the substantial expansion of the internal financial market; internal sources of

¹⁵ This approach to economic policy is known as the supply-side concept.

monetization, including refinancing; etc.) and to enhance the stability of the national banking system and its role in transforming savings into investment. Overall, given the salient features of the current situation in anti-inflationary policy, priority should be given to measures to support domestic producers and real competitive environment in the goods and services market.

As known all inflation types have substantial economic and social effects; moreover, these effects are usually adverse:

- The depreciation of savings is detrimental to recipients of fixed income (pensions, wages and salaries, and bank deposit interest).

- There is a decrease in the actual value of time deposits, insurance policies, fixed-rate annual rents, etc. Inflation also redistributes income between borrowers and lenders, being to the benefit of the borrower.

- In general economic relations are being distorted. Risks in long-term lending and investing processes become higher. Liquid funds flow into short-term speculative transactions, including transactions aimed at preserving the purchasing power of monetary resources.

- Bringing about an increase in demand, inflationary expectations lead to a constant rise in prices, which, if there are no appropriate mechanisms and tools for control, may result in rising inflation and social tensions.

Conclusions

The development of anti-inflationary measures in modern conditions should be based on interpreting inflation as a process with multiple factors. To be successful in dealing with the problem of consumer price growth requires the development and implementation of comprehensive anti-inflationary measures that are closely linked to structural policy.

Regulators' priority should be to maintain well-balanced economic growth, employment, and household income. It is necessary to be prepared for the fact that economic growth and, all the more so, growth acceleration will inevitably involve a rise in prices. A different matter is that a full range of economic instruments should be used in order to curb inflation.

If well balanced, comprehensive anti-inflationary measures taken by the government can produce positive results. In this regard, it is worth saying once more that the most important measures listed below deserve attention:

- keep down natural monopoly tariffs
- control public spending
- stimulate production (including agriculture) and formulate stable rules for import regulation

- support investing activities and competition
- other.

The Russian economy is bound to deal with ensuring sustained development and minimizing external risks. For this purpose, it is necessary that the Russian economy receives adequate financial resources, which should come primarily from domestic rather than external sources of monetization, with national monetary authorities having a leading role in the process (as is the case in mature financial systems). These resources should be directed at specific targets (i.e. they ought to support economic priorities of development). Inflation risk should be kept down both by the low level of our monetization and by the reduced importance of the monetary component of inflationary developments, while the resulting potential for economic growth will provide the foundations for economic development for many years.