

Problems of Economic Transition, vol. 53, no. 4, August 2010, pp. 35–51.
© 2010 M.E. Sharpe, Inc. All rights reserved.
ISSN 1061–1991/2010 \$9.50 + 0.00.
DOI 10.2753/PET1061-1991530403

V.G. PAPAUA

The Problem of Zombification of the Postcommunist Necroeconomy

Among the numerous problems caused by the current global financial crisis, one can single out attacks on the economy by zombie-firms on a global scale. Several recent publications have been devoted to this new sphere of economics, known as “zombie-nomics.” Zombification of the economy creates additional threats for postcommunist states, which for the most part still lag behind Western market economic models. The author’s goal is to set out the main reasons why postcommunist countries might suffer more than developed countries from the consequences of zombification of their economies. The author suggests some measures that are essential for the first group of countries, especially during the postcrisis period.

Among the many problems caused by the current global financial crisis,¹ the worldwide attack of zombie firms on the economy stands out.² Publications have come out about a new field of economics: zombie-nomics.³ The zombification of the economy is creating additional threats for postcommunist countries, which are, in most cases, still far from Western models of market management.

“English translation © 2010 M.E. Sharpe, Inc., from the Russian text © 2009 “Instituta Kennana v Rossii.” “Problema zombirovaniia postkommunisticheskoi nekroekonomiki,” *Vestnik instituta Kennana v Rossii*, 2009, no. 15, pp. 37–48.”

Vladimer Georgievich Papava is a Doctor of Economic Sciences, professor, corresponding member of the National Academy of Sciences of Georgia, senior fellow at the Georgian Foundation for Strategic and International Studies, chief research fellow at the Gugushvili Institute of Economics, former minister of economics (1994–2000), and member of parliament of Georgia (2004–8).

Translated by James E. Walker.

The purpose of this article is to reveal the basic reasons why zombification of the economy may lead to more serious consequences in postcommunist countries than in developed countries. Some measures that the former group of countries need to carry out, especially in the postcrisis period, are suggested in this regard.

We will begin our examination of this problem with a brief description, on the one hand, of the phenomenon of a zombie economy and, on the other, of the basic characteristics of a postcommunist economy.

What can we learn from the Japanese experience?

The phenomenon of a zombie economy is associated primarily with Japan, where it originated in the 1990s.⁴ The basis of a zombie economy is made up of insolvent, practically bankrupt firms that continue to exist in spite of this, which is why they are called zombies.⁵

The main financial source for the operation of zombie firms is the lending system.⁶ In particular, so-called zombie banks give these firms loans on favorable terms (e.g., at a reduced interest rate, below the market average).⁷ Such clearly unjustified loans lead to obvious losses for these banks.⁸

How do zombie banks manage to stay afloat? They are generally backed by the government,⁹ which gives guarantees and insures deposits. This means that zombie banks ultimately exist at the taxpayers' expense.¹⁰ Such a financial structure encourages the conversion of healthy firms into zombies.¹¹

As a result of the interrelations of zombie firms, zombie banks, and the government, a zombie economy is established, which puts a heavy burden on the healthy part of the economy. In particular, the existence of zombie firms supported by loans from zombie banks on favorable terms limits the possibility of healthy new firms entering the market.¹² Such firms have to take out loans at higher interest rates.¹³ Moreover, because they can borrow money on favorable terms, it is easier for zombie firms to lower prices¹⁴ and raise their employees' wages.¹⁵ And in the end, inhibiting the entry of healthy, that is, more efficient, firms into the market diminishes the efficiency of the whole economy.¹⁶

A zombie economy takes root in a financial crisis.¹⁷ As we know, under conditions of stagnation, production and trade fail to grow for a relatively long time, which is accompanied by increased unemployment and reductions in wages and the population's standard of living. People

generally demand that the government get the economy out of this state; the government tries to keep the country's banking and whole economic system afloat through government funding.

After the financial crisis ends, the unviable part of the economy tries to preserve the government support it enjoyed under the stagnation conditions. Thus, a zombie economy may be considered the legacy of a financial crisis.

It should be emphasized that the phenomenon of a zombie economy characterizes not only developed market economies, such as Japan,¹⁸ but also developing countries.¹⁹

The roots and essence of a necroeconomy

The experience of many postcommunist countries shows that lifeless firms function quite successfully in them, regardless of financial crises. The explanation for this has to be sought in one of the main features of a command economy, which is associated with the quality of its material and technical resources.

The denial of competition in a command economy destroyed the sole effective stimulus for economic development, as a result of which its products were generally of low quality, and their prices were kept artificially low through subsidies from the state budget. In the Soviet Union, the main source of revenue for the state budget was proceeds from the sale of alcoholic beverages, and exporting raw materials (primarily oil) was almost the only reliable way of obtaining foreign currency.

After the collapse of the command economy, with rare exceptions (in particular, some facilities for generating hydroelectric power, oil and gas production, and primary processing of raw materials), all of the goods produced in the postcommunist countries were incompatible with international standards and could not compete due to low quality and/or high price. There is no market for such goods, and no such market can exist in principle. An economy of this type can be called dead, that is, a necroeconomy,²⁰ and the theory that studies it can be called necroeconomic theory, or necroeconomics.²¹ The concept of a "virtual economy"²² is closest to that of a necroeconomy.

The part of an economy that remains viable we arbitrarily call a vital economy, or vitaeeconomy, and the theory that studies it can be called vitaeeconomic theory, or vitaeeconomics, which is no different in content from economic theory (economics) as it is generally understood.

What do a necroeconomy and vitaeconomy have in common, and how do they differ?

In a necroeconomy, as in a vitaeconomy, goods can be produced, that is, there can be supply. But in contrast to a vitaeconomy, there is no demand in it (because of low quality and/or high price). Consequently, a necroeconomy precludes any rational act of purchase or sale as well as the existence of an equilibrium price.

Common sense tells us that the dead segment of an economy should not have any effect on the living part of it. According to economic theory, what should happen in market conditions is that noncompetitive production disappears and does not cause problems for the rest of the economy. This explains why economic theory has been limited to studying the market economy, in which the existence of necrofirms is denied. In reality, everything is much more complex.

In particular, in countries that are in the process of postcommunist transformation, as well as in countries with postcommunist capitalist systems, a necroeconomy has been established on the basis of the material and technical resources of the command economy.

A postcommunist economy consists of the following necroeconomic and vitaeconomic groups:

1. The necroeconomy in the public sector;
2. The vitaeconomy in the public sector;
3. The privatized necroeconomy;
4. The privatized vitaeconomy;
5. The vitaeconomy created by means of new private investments.

The first group generally includes large and medium-size manufacturing facilities that are considered strategic based on the purpose of the goods they produce, although because they are not competitive these firms are dead in market conditions.

The vitaeconomy in the public sector is predominantly based on energy (primarily firms that generate and transmit electric power, and produce and supply oil and gas), transportation, and communications. If they have been privatized, they move into the fourth group: the privatized vitaeconomy. The second group may also include some medium-size and small industrial facilities (until they are privatized).

The third group includes firms from the first group after they have been privatized. By itself, a change in the form of ownership does not mean that these firms have been revived: the state of being deceased

does not change depending on whether a firm is publicly or privately owned. Ignoring this fact is the main reason that privatization has been discredited, when, especially in its initial stage, it has been expected to revive such firms, apart from any investment, regardless of what condition they are in.

The fifth group encompasses the healthiest part of the postcommunist economy, which is newly created via private investments on market principles.

Sisters, but not by blood!

At first glance, it may seem that “necroeconomy” and “zombie economy” are two different terms for the same phenomenon: a dead economy that continues to function in spite of its condition. Actually, the only thing they have in common is that both are characterized by the presence of a dead economy. The differences between them are much more significant.

First, they appear in qualitatively different economic systems: a necroeconomy, in the depths of a command economy; and a zombie economy, in the depths of a market economy. So the former is almost unrelated to a financial crisis, while the latter is a direct product of it.

Moreover, as we already indicated above, zombie banks play a special role in the existence of zombie firms, while businesses in a necroeconomy try to operate via mechanisms that provide support for them from the state budget in the form of subsidies or tax exemptions.

Another difference between a necroeconomy and a zombie economy, we should point out, is the sectors in which they are most often found. For instance, a necroeconomy is primarily made up of large and medium-size manufacturing facilities, while, as Japanese experience has shown,²³ there are almost no zombie firms in this sector. At the same time, the larger a manufacturing firm is in postcommunist countries, the greater the likelihood that it is part of the necroeconomy, while in Japan none of the largest firms are zombie firms because they have greater financial opportunities. Zombie firms are most often encountered among relatively large small firms.²⁴

It is worth noting that, while in ordinary times the International Monetary Fund (IMF) insists that subsidies from the state budget be terminated in postcommunist countries and any tax exemptions be eliminated, in financial crises a lobbying system starts to operate, the purpose of which is to make sure that these institutions receive financial support from

national governments in carrying out their easy lending programs.²⁵

Thus, we can conclude that a necroeconomy and a zombie economy are two related, but still significantly different phenomena. In other words, they are sisters, but not by blood!

Unfortunately, the differences between these phenomena are far from always taken into account, and sometimes the problems of dead firms in postcommunist countries (most often on the example of China or Russia) are studied in the context not of a necroeconomy, but of a zombie economy.²⁶

Why do necroeconomies and zombie economies remain alive, and how can they be eliminated?

The answer to the question of how a necroeconomy or a zombie economy can exist relatively stably can be found by turning to the evolutionary theory of economic change.²⁷ The main tool of this theory is the concept of “routines,” meaning established rules and patterns of firms’ behavior that regulate their reproduction.

It is a routine established over the course of many decades in the depths of a command economy that compels dead firms in postcommunist countries to operate in a command economy regime that no longer exists. As a result, in the absence of special government support, their warehouses are full of uncompetitive products, and because it is fundamentally impossible to sell them, nonpayments of wages and practically hopeless debts to the state budget, social funds, the energy sector, and other firms accumulate. This creates a tangled network of firms’ debts to each other.²⁸

According to traditions established in the command economy, when an enterprise accumulated debts (even if deliberately), its director raised the question with government agencies at higher levels (decision-making organizations of the Communist Party, Gosplan, the Ministry of Finance) about writing them off, and usually achieved his goal. With a practically unlimited (or rather, guaranteed) possibility of writing off debts, the director of an enterprise did not see any danger in accumulating them. This mechanism of writing off debts is a fixed regime that, unfortunately, is periodically manifested in different versions of a “tax amnesty” in countries with postcommunist capitalist systems.²⁹

As for the routines of a zombie economy, they are established during financial crises, when interrelations between the government and banks

are adjusted to support unprofitable firms in order to avoid a more serious recession and increased unemployment. If stagnation is relatively prolonged, these interrelations develop into rules and patterns of firms' behavior that regulate the reproduction of this behavior, that is, into an appropriate routine. It is important to note here that prolonged stagnation is a necessary condition for a specific routine to take shape.

After the financial crisis ends, this routine allows the zombie economy to exist, since all governments, at the very least, want to avoid an increase in unemployment, which will obviously happen if zombie firms are closed, because healthy firms cannot immediately respond to the shutdown of zombie firms and promptly create new jobs.³⁰

There is no doubt that a necroeconomy or a zombie economy negatively affects the development of their respective countries. Consequently, we need to find and implement a mechanism for eliminating them.

The key to solving the problem of a necroeconomy lies in the evolutionary theory of economic change that was mentioned above.

The government must pay special attention to the fifth group of firms in the postcommunist economy: the private sector created exclusively through private investments. The government should help strengthen and expand it and try to create a stable political and macroeconomic environment in which new firms will appear with the help of private investments. It must be taken into account that the routine that is established in this group of firms is of a market nature and, thus, presents no necroeconomic danger for society.

The main priority of a postcommunist government's economic policy should be to narrow the range of the first and third groups by expanding the fifth group throughout the economy. In particular, firms of the fifth group are created on the principles of a vitaeconomy, and, if such a firm ceases to be competitive, the appropriate routine of this group should provide for its relatively painless departure from the arena.

As for the second and fourth groups, regardless of whether a specific firm still belongs to the state or has already been privatized, it urgently needs to attract new investments by selling an appropriate share of its equity, or at least transferring the right of management to a strategic investor for a long-term period. Otherwise, it becomes considerably more likely that a vitaeconomy from the second and fourth groups will develop into a necroeconomy of the first and third groups, respectively.

As we pointed out above, privatization does not automatically lead to the destruction of a necroeconomy. Consequently, the government has

only one way to ensure the operation of firms from the first group that serve a strategic purpose: an open tender (possibly international) to find a strategic investor to which a specific dead facility will be transferred to start up new production within its walls.

The third group, the privatized necroeconomy, has absolutely no prospects. The overwhelming part of its material and technical resources can only be called scrap metal.

It is theoretically clear that an effective mechanism for the destruction of a necroeconomy directly involves bankruptcy laws. The experience of many postcommunist countries shows that, although they have bankruptcy laws on the books, these laws are, unfortunately, stillborn,³¹ that is, they are necrolaws, because the actual bankruptcy of a firm is generally not legally executed. In these countries, all kinds of obstacles to the execution of bankruptcy laws are widespread, which is largely explained by the fact that they do not fit in the existing institutional environment in a particular country.

What is happening with the bankruptcy law, for example, in Georgia, which is considerably burdened by a necroeconomy,³² clearly confirms that many new institutions in postcommunist countries are created by the direct, conscious imitation of Western models.³³

Bankruptcy laws are also an effective tool for combating zombie firms and zombie banks. Unfortunately, it must be said that things are no better in this regard in developed countries than they are in postcommunist ones. In particular, a clear trend is observed toward making it more complicated to legally execute an actual state of bankruptcy.³⁴

Followers of the routines of a necroeconomy or zombie economy

A routine that reproduces a necroeconomy is determined by the behavior of a person who is in the process of transition from the *homo soveticus* type that was established under the conditions of a command economy (i.e., a person repressed by the state and completely dependent on it)³⁵ to the *homo economicus* type (i.e., a person typical of a market system, whose motivations are to achieve maximum utility in a household and obtain maximum profit in a firm), taking into account all of the changes to which this category has been subjected in the post-Smithian era.³⁶

According to L. Abalkin, “On the whole, the Russian school of economics is characterized by recognition of the primacy of a general, national-economic approach to an individual’s actions and motivation,

and the creation of sociopolitical and spiritual/moral principles for the development of initiative and business ethics.” It is not surprising that “rejection of the concept of ‘economic man’ and of attempts to analyze him in isolation from society, from the environment in which he lives, can be considered a distinguishing characteristic of the Russian worldview.” If to this it is added that, “With his teaching, V.I. Lenin . . . reproduced the traditions of Russian economic thought,”³⁷ then, based on this statement of the question, one must admit that *homo soveticus* was conceived in the depths of the Russian worldview. The conventionality of this assertion is indicated by the thought, which can be clearly proved, that the idea of Russian society as exclusively collectivist, joint, and communal is no more than a myth.³⁸

We classify the type of person who is undergoing the process of postcommunist transformation, in other words, the main hero of postcommunist capitalism, as *homo transformaticus*, that is, someone who has not been able to fully free himself from fear of the government and from the habits of existing at its expense, though at the same time he is gradually beginning to act based on his own private interests in achieving maximum utility and profit.³⁹

Following Yurii Levada’s concept of *homo adapticus*,⁴⁰ we can state that *homo transformaticus* is someone who is gradually adapting to the inherent rules of a market economy and by doing so, himself participates in their creation and development.

In business, *homo transformaticus* acquires a special form, and his roots go back to the command economy.

Even in command economy conditions, market relations were not 100 percent eliminated. However, they were so suppressed by the government that they existed only in the shadow sector.⁴¹ No director (with rare exceptions) could manage an enterprise without breaking laws established by the existing regime. In individual cases, elements of a market economy were used. This activity was related to the shadow sector, and the enterprise managers who engaged in it were called “shadowmen” [*teneviki*].⁴² In spite of this, in a command economy they did not and could not become market businessmen, for their behavior was shaped by the political pressure of the communist regime. It was for good reason that the directors of enterprises who used elements of market behavior were not called “businessmen,”⁴³ but “del’tsy” [dealers].

After the collapse of the command economy, in most cases the “post-del’tsy” [former dealers] were able to keep their positions as directors

in the public sector,⁴⁴ and when it was privatized they made use of labor collective rights and became owners of their respective firms.⁴⁵ Regardless of whether or not they hired managers, the management of these firms was based on a dealer's way of thinking, especially at the beginning of the privatization period.⁴⁶

Just as *homo transformaticus* is not yet *homo economicus*, the former dealers could not turn themselves into businessmen. In a business environment, *homo transformaticus* acquires the title of "former dealer."⁴⁷

It is these former dealers who stand behind the necroeconomy in both the public and private sectors; they are the initiators of behavior that fits the routine of the command economy. Using their old connections, they work their way into government organizations (in both the legislative and executive branches) and try to use their influence politically to justify and prolong the existence of the necroeconomy.⁴⁸

The key to understanding the routine of a zombie economy is provided by James Buchanan's public-choice theory, according to which policy is interpreted as a special kind of market.⁴⁹ In financial crises, an economic policy is worked out that, on the one hand, proclaims that the government's highest goal is to intervene in the economy so as to bring it out of the crisis situation and, on the other hand, favors the private interests of economic agents who are on the verge of bankruptcy because of the crisis.

As we pointed out above, the routine of a zombie economy is the product of a market economy that is going through a financial crisis. Consequently, a follower of this routine is not simply *homo economicus*, but a mutant of the species that has been created in the process of adaptation to the conditions of a market economy's operation deformed by a financial crisis. In our opinion, such a mutant is most accurately characterized by the term *zombie economicus*.⁵⁰

In contrast to the *zombie economicus* type of person that has already been taken shape, *homo transformaticus* is in the process of adaptation to a market economy, that is, he has not yet been fully formed. This raises the question of how likely it is that *zombie economicus* will be created from *homo transformaticus* in the current crisis conditions.

Is there a threat of zombification of the necroeconomy?

In the current global financial crisis, many countries are resorting to special government programs to help private financial institutions and,

at times, firms in the real sector,⁵¹ which threatens to establish the routine of a zombie economy. This threat may become quite real, if the crisis is so prolonged that the routine of a zombie economy has time to take shape.

Several years ago, the existence of a zombie economy in the United States was categorically denied,⁵² but recently, because of the financial crisis, more and more talk is heard about the danger of zombie firms appearing.⁵³ Nevertheless, even now this problem is often ignored.⁵⁴ At the same time, the government's program of financial support can be fairly classified as a zombie program, and the U.S. Department of the Treasury is assuming the status of mother of a zombie economy.⁵⁵ It is necessary to emphasize that the first signs of movement in the direction of zombification of the banking sector appeared in the United States long before the beginning of the current financial crisis, when government subsidies stimulated the insurance of banks' mortgage loans for low-income borrowers who did not meet the generally accepted bank requirements.⁵⁶ It is important to take into account here that psychological factors lie at the foundation of this crisis: Americans' habit of going into debt without being sure that they will be able to repay it.⁵⁷

The danger of creating a zombie economy has also become real for Canada⁵⁸ and some countries of the European Union.⁵⁹

In countries with postcommunist capitalist systems, the financial crisis is also fostering the development of government programs that are based on financial support for distressed banks and firms.⁶⁰ Plans have been put into action to create special government institutions (banks) to carry out long-term lending and investment on favorable terms.⁶¹

Even though economic theory and international experience proved long ago the pernicious nature of government lending on favorable terms,⁶² both developed and postcommunist countries again and again resort to this tool to counteract a financial crisis. And in the final analysis this helps to create the routine of a zombie economy.

The current financial crisis has made the principle of "privatization of profits and nationalization of losses"⁶³ especially timely.

While a real threat of zombification of the economy hangs over developed countries in crisis conditions, this threat weighs even heavier on countries with postcommunist capitalist systems because of the necroeconomy. It was clear that if a crisis came many Russian (and not only Russian) companies would not be able to pay off their debts without government assistance.⁶⁴

If we remember the nature of the material and technical resources of

the necroeconomy, which is concentrated precisely in industry, it is not at all surprising that during a financial crisis the necroeconomy makes its presence known in a drop in industrial production.⁶⁵ And former dealers continue to act as they are accustomed to, giving bribes to government officials in order to receive relatively cheap financial support.⁶⁶

When crisis conditions are absent, the problem of the necroeconomy is felt less acutely in large countries than in relatively small ones. In large-scale economies, necrofirms that receive support from the government have the possibility of competing with each other,⁶⁷ which creates the illusion that there is no necroeconomy. In small countries, many necrofirms simply have no domestic equivalent.⁶⁸

This difference between big and small countries also affects government policy for supporting the necroeconomy. In particular, the illusion that there is no necroeconomy due to domestic competition significantly impedes the process of eliminating it in large countries. The lack of equivalents of particular necrofirms makes competition within a country impossible, as a result of which small countries have more motivation to get rid of the necroeconomy, although it is not always properly used.⁶⁹

In a financial crisis, the governments of postcommunist countries have fewer and fewer opportunities to preserve the illusion that there is no necroeconomy, and so it is not surprising that they have a catastrophic drop in industrial production.

Since financial crises also create fertile soil for establishing the routine of a zombie economy, that is, zombification of the economy, in countries with postcommunist capitalist systems, zombification of the necroeconomy also occurs. While Japanese experience shows that the zombie economy did not affect manufacturing, that is precisely where the necroeconomy is concentrated. Thus, we are talking about zombification of a sector that is already dead.

The first symptoms of zombification of the necroeconomy appeared in Russia at the time of the August crisis in 1998, which led some observers to conclude that the phenomenon of a postcommunist zombie economy was occurring.⁷⁰ The current crisis in Russia under the impact of both internal and external factors may be far more prolonged, and so its consequences may be far more serious.

Above all, as a result of this process, instead of the formation of *homo economicus* from *homo transformaticus*, we will get *zombie economicus*, which will make the economic future of postcommunist countries even more dubious.

In place of a conclusion, or what should be done in order to remain an optimist?

Dead enterprises inherited from the command economy turned out to be relatively alive, as a result of which the market economy of many postcommunist countries is heavily burdened by a necroeconomy. It is the necroeconomic foundation that determines the specific nature of postcommunist capitalism. A follower of the necroeconomy's routine is *homo transformaticus*, a person who is transforming the economy and the whole of society in the direction of capitalist values, and in so doing, is himself being transformed in the same direction.

The phenomenon of a dead part of the economy is no stranger to some developed countries: financial crises fostered the establishment of a routine that provides ongoing government support, through the banking system, to firms that are actually bankrupt. This creates a network of zombie banks and zombie firms, which constitutes a zombie economy.

In contrast to a follower of a necroeconomy, whose routine is still in the process of formation, a follower of a zombie economy's routine is no longer a person, but a zombie: *zombie economicus*.

In the current financial crisis, the threat of zombification of the economy is growing dramatically even in developed countries that had managed to avoid it until recently.

Zombification of the economy presents an even greater danger for postcommunist countries, because in this case zombification of the necroeconomy also occurs, which will make their recovery in the postcrisis period considerably more difficult.

The only effective mechanism for eliminating either a necroeconomy or a zombie economy is the use of bankruptcy laws, which requires appropriate political will on the part of the governing elite. We can hardly expect that this elite in any country of the world will summon the will to make use of the bankruptcy mechanism during the financial crisis, but it is very important to put it into action without delay in the postcrisis period. The country whose leaders have the political will to eliminate the zombie economy and the necroeconomy will receive a powerful impetus for economic recovery.

Notes

1. For example, P. Krugman, *The Return of Depression Economics and the Crisis of 2008* (New York: Norton, 2008); L. Grigor'ev and M. Salikhov, "Finansovyi

krizis—2008: vkhozhdenie v mirovuiu retsessiiu,” *Voprosy ekonomiki*, 2008, no. 12 [translated as “Financial Crisis 2008: Entering Global Recession,” in *Problems of Economic Transition*, vol. 51, no. 10 (February 2009), pp. 35–62].

2. J. Stepek, “How Zombie Companies Suck the Life from an Economy,” *MoneyWeek*, November 18, 2008, available at www.moneyweek.com/news-and-charts/economics/how-zombie-companies-suck-the-life-from-an-economy-14089.aspx/; J. Willie CB, “Gold, Zombie Banking System, Lightning, Earthquakes and Hurricanes,” *Market Oracle*, January 20, 2009, available at www.devex.com/articles/zombie-economics/.

3. L. LeLaulu, “Zombie Economics?” Development Executive Group, January 13, 2009, available at www.devex.com/articles/zombie-economics/.

4. For example, T. Hoshi, “Economics of the Living Dead,” *Japanese Economic Review*, 2006, vol. 57, no. 1.

5. For example, Zombie, www.investorglossary.com/zombie.htm.

6. R.J. Caballero, T. Hoshi, and A.K. Kashyap, “Lending and Depressed Restructuring in Japan,” NBER Working Paper 12129, 2006; D.C. Smith, “Loans to Japanese Borrowers,” *Japanese International Economies*, 2003, vol. 17, no. 3.

7. Caballero, Hoshi, and Kashyap, “Lending and Depressed Restructuring in Japan”; Smith, “Loans to Japanese Borrowers”; T. Hoshi and A. Kashyap, “Solutions to Japan’s Banking Problems: What Might Work and What Definitely Will Fail,” in *Reviving Japan’s Economy: Problems and Prescriptions*, ed. T. Ito, H. Patrick, and D.E. Weinstein (Cambridge: MIT Press, 2005).

8. A.G. Ahearn and N. Shinada, “Zombie Firms and Economic Stagnation in Japan,” *International Economics and Economic Policy*, 2005, vol. 2, no. 4, p. 368.

9. E.J. Kane, “The Dialectical Role of Information and Disinformation in Regulation-induced Banking Crises,” *Pacific-Basin Finance Journal*, 2000, vol. 8, no. 3–4, p. 301.

10. E.J. Kane, “Capital Movements, Banking Insolvency, and Silent Runs in the Asian Financial Crisis,” *Pacific-Basin Finance Journal*, 2000, vol. 8, no. 2, p. 164.

11. Hoshi, “Economics of the Living Dead,” p. 40.

12. *Ibid.*, p. 33.

13. R. Caballero and A.K. Kashyap, “Japan’s Indian Summer,” *Wall Street Journal*, July 18, 2002.

14. Smith, “Loans to Japanese Borrowers,” p. 288.

15. Hoshi, “Economics of the Living Dead,” p. 33.

16. Ahearn and Shinada, “Zombie Firms and Economic Stagnation in Japan,” p. 364.

17. T. Hoshi and A.K. Kashyap, “Japan’s Economic and Financial Crisis: An Overview,” *Journal of Economic Perspectives* (Winter 2004), available at <http://faculty.chicagogsb.edu/ani.kashyap/research/japancrisis.pdf>; Ahearn and Shinada, “Zombie Firms and Economic Stagnation in Japan.”

18. For example, P. Holle, “The Evolution of a Zombie Economy,” Frontier Centre for Public Policy, March 15, 2005, available at http://fcpp.org/main/publication_detail.php?PubID=979/.

19. For example, Kane, “Capital Movements, Banking Insolvency, and Silent Runs in the Asian Financial Crisis.”

20. V. Papava, “Nekroekonomika—fenomen postkommunisticheskogo perekhodnogo perioda,” *Obshchestvo i ekonomika*, 2001, no. 5.

21. V. Papava, "Necroeconomics—the Theory of Post-Communist Transformation of an Economy," *International Journal of Social Economics*, 2002, vol. 29, no. 9/10; idem, *Necroeconomics: The Political Economy of Post-Communist Capitalism* (New York: iUniverse, 2005).

22. C. Gaddy and B. Ickes, *Russia's Virtual Economy* (Washington, DC: Brookings Institution Press, 2002).

23. Hoshi, "Economics of the Living Dead."

24. Ibid.

25. Kane, "Capital Movements, Banking Insolvency, and Silent Runs in the Asian Financial Crisis," p. 163; Kane, "The Dialectical Role of Information and Disinformation in Regulation-induced Banking Crises," p. 288.

26. For example, B. Lindsey, *Against the Dead Hand: The Uncertain Struggle for Global Capitalism* (New York: Wiley, 2002), pp. 126, 153; Kane, "The Dialectical Role of Information and Disinformation in Regulation-Induced Banking Crises," pp. 300–301; A. Shleifer and D. Treisman, *Without a Map: Political Tactics and Economic Reform in Russia* (Cambridge: MIT Press, 2000), pp. 106–7.

27. R.R. Nel'son [Nelson] and S.Dzh. Uinter [S.J. Winter], *Evoliutsionnaia teoriia ekonomicheskikh izmenenii* (Moscow: ZAO Finstatinform, 2000) [Originally published as *An Evolutionary Theory of Economic Change* (Cambridge: Belknap Press of Harvard University Press, 1982).]

28. For example, A. Oslund [Åslund], *Rossia: rozhdenie rynochnoi ekonomiki* [How Russia Became a Market Economy] (Moscow: Respublika, 1996), pp. 256–64; idem, *Stroitel'stvo kapitalizma: rynochnaia transformatsiia stran byvshego sovet'skogo bloka* [Building Capitalism: The Transformation of the Former Soviet Bloc] (Moscow: Logos, 2003), pp. 363–69, 478–80, 484–86.

29. For example, I. Nikolaev, "Perspektivy nalogovoi amnistii v Rossii," *Obshchestvo i ekonomika*, 2002, no. 6; I. Shul'ga, "Opyt nalogovoi amnistii v Kazakhstane," *Obshchestvo i ekonomika*, 2002, no. 6.

30. For example, Caballero and Kashyap, "Japan's Indian Summer"; Lindsey, *Against the Dead Hand*, p. 235.

31. A. Sánchez-Andrés and J.M. March-Poquet, "The Construction of Market Institutions in Russia: A View from the Institutionalism of Polanyi," *Journal of Economic Issues*, 2002, vol. 36, no. 3.

32. V. Papava and M. Tokmazishvili, "Fundament nekroekonomiki i razvitie delovoi aktivnosti v postrevoliutsionnoi Gruzii," *Kavkaz i Globalizatsiia*, 2007, vol. 1 (4).

33. B. Shavans and E. Man'ian, "Postsotsialisticheskie traektorii i zapadnyi kapitalizm," *Mirovaia ekonomika i mezhdunarodnye otnosheniia*, 1999, no. 12.

34. For example, M.P. Cussen, "Changing the Face of Bankruptcy," Investopedia, available at www.investopedia.com/articles/pf/08/bankruptcy-act.asp?partner=NTU/.

35. For example, A.V. Buzgalin, *Perekhodnaia ekonomika: kurs lektsii po politicheskoi ekonomiki* (Moscow: I.B. Taurus, 1994), pp. 250–53.

36. For example, V.S. Avtonomov, *Model' cheloveka v ekonomicheskoi nauke* (St. Petersburg: Ekonomicheskaiia shkola, 1998), pp. 57–201; M.K. Bunkina and A.M. Semenov, *Ekonomicheskii chelovek* (Moscow: Delo, 2000).

37. L.I. Abalkin, "Poisk samoopredeleniia. Otechestvennaia shkola ekonomicheskoi mysli na rubezhe vekov," *Nezavisimaia gazeta—Politekonomika* (supplement to *Nezavisimaia gazeta*) (November 5, 2000), no. 15 (56).

38. E.A. Pain, “‘Osobyi put’ Rossii’: inertsiiia bez traditsii,” Preprint WP14/2008/01 (Moscow: Izdatel’skii dom GU—VShE, 2008), p. 18.

39. V. Papava, “Doktrina rynochnogo ravenstva: voprosy teorii i ee prilozheniia k protsessu postkommunisticheskoi transformatsii,” *Obshchestvo i ekonomika*, 1999, no. 12; idem, “The Georgian Economy from ‘Shock Therapy’ to ‘Social Promotion,’” *Communist Economies and Economic Transformation*, 1996, vol. 8, no. 8.

40. Iu.A. Levada, “Chelovek prispособlennyi,” *Monitoring obshchestvennogo mneniia: ekonomicheskie i sotsial’nye peremeny* (September–October 1999), no. 5 (43).

41. For example, A.N. Shokhin, *Sotsial’nye problemy perestroiki* (Moscow: Ekonomika, 1989), pp. 57–83.

42. For example, A.I. Samsun, *Osnovy filosofii ekonomiki* (Moscow: Iuniti, 2003), p. 184.

43. The Soviet economy was described as “an economy without businessmen” (G.K. Gins, *Predprinimatel’* [Frankfurt am Main: Posev, 1992], p. 119).

44. A. Åslund, *Russia’s Capitalist Revolution: Why Market Reform Succeeded and Democracy Failed* (Washington, DC: Peterson Institute for International Economics, 2007), pp. 137–40.

45. A. Oslund [Åslund], “‘Rentoorientirovannoe povedenie’ v rossiiskoi perekhodnoi ekonomiki,” *Voprosy ekonomiki*, 1996, no. 8.

46. For example, A. Nekipelov, “Problemy upravleniia ekonomikoi v transformiruemom obshchestve,” in *Sotsial’no-ekonomicheskie modeli v sovremennom mire i put’ Rossii*. Book 1: *Transformatsiia postsotsialisticheskogo obshchestva*, ed. K.I. Mikul’skii (Moscow: Ekonomika, 2003), p. 127.

47. V. Papava and N. Khaduri, “On the Shadow Political Economy of the Post-Communist Transformation. An Institutional Analysis,” *Problems of Economic Transition*, 1997, vol. 40, no. 6, pp. 15–34.

48. A situation similar to the participation of *homo transformaticus* is being created in the social sector (see L. Dzh. Kuk [L.J. Cook], “Politika, privatizatsiia i informalizatsiia v khode reformirovaniia postsovetskogo sotsial’nogo gosudarstva,” *Vestnik Instituta Kennana v Rossii*, 2008, no. 13).

49. Dzh. Biukenen [J. Buchanan], “Konstitutsiia ekonomicheskoi politiki” [The Constitution of Economic Policy], in Dzh. Biukenen [J. Buchanan], *Sochineniia* (Moscow: Taurus Al’fa, 1997).

50. V. Papava, “Is Zombie Economicus Coming?” *Market Oracle*, February 7, 2009, available at www.marketoracle.co.uk/Article8736.html.

51. V. Mau, “Drama 2008 goda: ot ekonomicheskogo chuda k ekonomicheskomu krizisu,” *Voprosy ekonomiki*, 2009, no. 2, pp. 22–23.

52. W. Bonner and A. Wiggin, *Financial Reckoning Day: Surviving the Soft Depression of the 21st Century* ([Hoboken], NJ: Wiley, 2003), p. 120.

53. P. Coy, “New Menace to the Economy: ‘Zombie’ Debtors,” *Business Week*, January 15, 2009, available at www.businessweek.com/magazine/content/09_04/b4117024316675.html; P. Krugman, “Wall Street Voodoo,” *New York Times*, January 18, 2009, available at www.nytimes.com/2009/01/09/opinion/19krugman.html?_r=2&partner=rssnyt&emc=rss/.

54. P. Krugman, “The Big Dither,” *New York Times*, March 5, 2009, available at www.nytimes.com/2009/03/06/opinion/06krugman.html.

55. J.H. Kunstler, “The Inevitable Fate of Our ‘Zombie’ Economy,” *Contrarian Stock Market Investing News*, November 28, 2008, available at www.contrarianprofits.com/articles/the-inevitable-fate-of-our-zombie-economy/9233/.

56. S.A. Holmes, "Fannie Mae Eases Credit to Aid Mortgage Lending," *New York Times*, September 30, 1999, available at www.nytimes.com/1999/09/30/business/fannie-mae-eases-credit-to-aid-mortgage-lending.html.

57. Iu. Ol' sevich, "Psikhologicheskie aspekty sovremennoi ekonomicheskogo krizisa," *Voprosy ekonomiki*, 2009, no. 3, p. 44.

58. F. Poschmann, "Beware of Zombies," *Financial Post*, January 26, 2009, available at <http://network.nationalpost.com/np/blogs/fpcomment/archive/2009/01/26/beware-of-zombies.aspx/>.

59. M. Kelly, *Machine Nation*, October 28, 2008, <http://machination.forumakers.com/economy-business-and-finance-f8/morgan-kelly-ourzombie-nation-and-zombie-banks-t1496.htm#43586>; F. Schnittger, *European Tribune*, January 14, 2009, www.eurotrib.com/?op=displaystory;sid=2009/1/14/113437/798/.

60. For example, A. Illarionov, "Priroda rossiiskogo krizisa," Institute ekonomicheskogo analiza, October 2, 2008, available at www.iea.ru/macroecon.php?id=8/.

61. For example, B. Danilishin, "Ekonomika Ukrainy: zhizn' posle krizisa?" *Zerkalo nedeli*, January 17–23, 2009, no. 1 (729), available at www.zn.ua/2000/2020/65131/.

62. For example, G. Khezlitt [H. Hazlitt], *Tipichnye oshibki gosudarstvennogo regulirovaniia ekonomiki* (Moscow: Serebrianye niti, 2000), pp. 22–28.

63. Mau, "Drama 2008 goda," p. 10.

64. *Ibid.*, p. 5.

65. A. Illarionov, "Noiabr'skii spad promyshlennogo proizvodstva—katastrofa, kotoraiia usugubliaetsia deistviiami vlastei," Institut ekonomicheskogo analiza, available at www.iea.ru/macroeconom.php?id=14/; idem, "Eto—katastrofa. Bespredsedentnyi spad noiabria," Institut ekonomicheskogo analiza, available at www.iea.ru/econom_rost.php?id=26/.

66. Mau, "Drama 2008 goda," p. 16.

67. For example, M. Schaffer and B. Kuznetsov, "Productivity," in *Can Russia Compete?* ed. R.M. Deal and I. Goldberg (Washington, DC: Brookings Institution Press, 2008).

68. For example, V. Papava and T. Beridze, *Ocherki politicheskoi ekonomiki post-kommunisticheskogo kapitalizma (opyt Rossii)* (Moscow: Delo i Servis, 2005).

69. Papava and Tokmazishvili, "Fundament nekroekonomiki i razvitie delovoi aktivnosti v postrevoliutsionnoi Gruzii."

70. Lindsey, *Against the Dead Hand*, pp. 210–11.