This article presents a discussion of the theoretical and methodological approaches to the analysis of economic distortions in post-Soviet countries. Here we justify and illustrate the neoinstitutional methodology in the economics of transition. In particular, we outline the transaction cost-benefit analysis for the studies of barterization that we observe during the transition from plan to market. Also the validity of the neoclassical and neoinstitutional approaches to the economic policy design is compared.

Introduction

According to the neoclassical economic tradition, barter exchange is treated as presumably inefficient. This inefficiency is generally associated with the need for costly provision of double coincidence of wants between the two trading parties. Economists recognize that barter has become institutionalized. At the same time they agree that there was not suggested a satisfactory explanation of why has non-monetary exchange become so ubiquitous mode of economic order across the post Soviet countries. Why do economic agents choose the inherently inefficient barter exchange? Theory predicts that it should not be the case. What was overlooked or underscored? Is this due to the drawbacks in theoretical approach that stands behind these explanations, and what is the nature of these drawbacks? What would be the better approach? Then, what would be the policy proposals suggested? We will attempt to answer these questions, and outline the suggestions for the further research on barter issues.

First, we will determine the transition-specific conditions to which economic theory should address the major account. The next sections will present the neoclassical and neoinstitutional visions of the exchange theory in order to ascertain theoretical grounds for the explanation of the shift to non-monetary exchange system. Then we will try to evaluate and summarize the existing explanations of barter under suggested theoretical approach. Finally we will contrast the applicability of the neoclassical and neoinstitutional fundamentals to the analysis of transition phenomena, and in particular, justify their explanatory potential, and evaluate merits for the policymaking.

Institutional content in the theory of transition

Recent decade formed a firm belief that economic problems in transition stem from the weak institutional framework and the distorted incentive structure. After the first successes in macroeconomic stabilization and price liberalization, reforms slowed down in post-Soviet economies. Rapid growth of non-monetary transactions, and nonpayments crisis have become the most striking features of the transition to market economy. Policy makers and politicians started talking about structural reform. Although there is no consensus upon the meaning of this term, everyone would agree that it is vitally important and it is about economic organization.

Seemingly it was not too much embarrassing task for reformers to reach macroeconomic goals. Some steps, like establishing currency convertibility, were solved with a scratch of a pen. Others, like halting uncontrolled emission, took several years of hyperinflation to make politicians learn the core principles of neoclassical macroeconomics. All what was needed at that stage was a good policy for the government and goodwill of the government. The short-term macroeconomic stability was supposed to provide necessary conditions for building microeconomic fundamentals for sustainable growth. At that point a much challen-

2 Among the policy makers there is a broad spectrum of definitions of structural reform. The broadest one mentions institutional transformation.
The transition from plan to market is difficult to downplay. It is impossible to alter the principles of the allocation in the economy without dramatic changes in its institutional environment. Competing social systems with distinct property rights structure had developed distinct core institutions for facilitating distinct allocation mechanisms. While corporations flourished in market economy, a Communist Party became a backbone of hierarchical structure in centrally managed economy. In modern economics language, the institutional design demonstrates the propensity to minimize transaction costs, and it is optimized to the nature of economic mechanism inherent to a particular social system.

Because of intrinsic inertia of institutional change, the development of market institutions in former Soviet economies was not that fast as expected. Any institutional change is heavily conditioned to a substantial extent by the inheritance of informal institutions. Unlike formal rules that can be changed relatively quickly, social norms change through generations. So it is crucial that informal rules be effective complement to formal ones. An illustration of the effectiveness of socio-cultural heritage can be found in Max Weber’s "Protestant Ethics and the Spirit of Capitalism". In transition environment the process of formal institutional change is contingent on the legacy of Soviet social norms, attitudes and conventions that evolved during Communist era. Although the monograph "Communist Ethics and Market Reforms" is yet to be written, we can hardly expect an optimistic story.

The communist legacy in informal institutional structure, weak civil society, and as a result, lagged legal and administrative reform emulated serious distortions in the incentive structure thus establishing wrong "rules of the game" that govern economic choice. What is the nature of such distortions? On the one hand, the property relations and social ideology had been altered; on the other hand, adequate market institutions did not evolve to fill the vacuum after the communist rule collapsed. The disruption of coordination mechanisms led to the increase in transaction costs in the economy. In an attempt of firms to modify their organizational, productive and transactional conduct in order to survive in disorganized environment (that is to minimize transaction costs) a special transition specific institutional framework has been developed.

A number of scholars believe that demonetization of the exchange, non-payments and other distortions demonstrate the adjustment of the firms to the disorganization and adversity of transition. Gaddy and Ickes (1998), and Pinto (2000) in their studies of evolution of barter, money surrogates, and trade credit point to the firms’ efforts to disseminate the effect of soft budget constraints. Commander and Mumssen (1999) explain these phenomena in terms of financing innovations in the face of shocks to bank credit and to explicit budgetary support. The explanations provided by Kaufmann and Marine (1998) represent barter as "an economic institution, which helps to cope with problems arising in transition". Recantini and Ryterman (1999) examine the spontaneous self-organization of firms into the formal and informal networks, and treat this as a response to the shock of transition. All of the proposed explanations implicitly clarify the idea that the observed anomalies in economic exchange are the best forms of conduct among the feasible alternatives.

**Money versus barter: a theoretical discussion**

The difference between monetary and non-monetary economy remains one of the disputable issues in monetary theory. Economists believe that money is preferable to barter due to their ability to reduce the cost of transacting for individuals. In the theory of origin of money, developed by Austrian economic school, stress is placed on the costly provision of double coincidence of wants that make barter possible. This implies that the process of searching for the exchange partner requires substantial resources. In reality it is impossible to link bartering partners without building lengthy chains of intermediate direct deals. This process invokes huge search and bargaining cost. Exchanging first for a widely desired good and using it to exchange for the directly desired good dramatically decreases these costs. According to Carl Menger (1893), the more widely the good is desired by everyone as a mediator of exchange, the closer it approaches to the status of money.

Although, economists have not reached a consensus on the role of money in the process of economic exchange, the long lasting discussion finally born the recognition of the importance of information aspect in the debate about usefulness of money. In contrast to the search cost approach, the new institutional economists put slightly different emphasis on information aspect of exchange. They focus on the costs of information about the attributes of the exchanged goods that make this good desirable and form its precise economic value. For instance, Armen Alchian (1977) appeals to the two distinct dimensions of money: medium of exchange and unit of account (measure of value):

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1. Let us take North’s definition of institutions as “humanly devised constraints that structure political and social interaction” (North, 1991, p. 97). Hence, informal institutions may be understood as a contingency of social norms, conventions and moral values that constrain individuals and organizations in pursuit of their goals.
"It is not the absence of double coincidence of wants, nor the costs of searching out the market of potential buyers and sellers of various goods, nor of record keeping, but the costliness of information about the attributes of goods available for exchange that induces the use of money in an exchange economy".

While seemingly contrast, these are not opposing but complementing each other approaches.

The definition of transaction cost introduced by Ronald Coase in 1937 as "cost of using the price mechanism" is based on the notion of the costliness of exchange and the recognition of information as scarce and valuable asset. Furthermore, Coase theorem shook the neoclassical paradigm that rests on fundamental assumption of unrestricted market exchange where agents are endowed with full information, and property rights are perfectly defined and enforced. Coase contested the postulation of laissez faire economics that prices costlessly incorporate all economic information about preferences and value. He argued that price mechanism allocate resources at positive cost that include discovering what the prices are, writing and enforcement of contracts etc.

The best, on my opinion, summary of Coase theorem implications can be found in Doug Allen (1991):

"If prices allocate at cost, then they compete with other allocating mechanisms like firms and governments ".

"... All methods of allocating resources have costs and benefits, and no single mechanism works for free and dominates all others — in modern language, all allocation mechanisms are "second best".

The New Institutional Economics that has grown on Coasean ideas presents an attempt to reform the neoclassical paradigm by incorporation of concepts of transaction costs and property rights. Nichans (1969, 1971) extended basic neoclassical model by introducing transaction costs that depend on the characteristics of commodities and traders involved in exchange. His model shows that in the process of indirect exchange (exchange facilitated by the medium good) there is a certain level of transaction cost associated with this medium high enough to make direct barter more efficient than indirect exchange. When the costs of mediated transacting outweigh double coincidence costs of direct barter the latter becomes more preferable. In his excellent review of the new institutional economics Thrainn Eggertsson (1990) concludes: "the choice of an exchange system depends in an important way on the cost of acquiring information about the trading parties and the cost of enforcing contracts".

Let us recall implicit and intuitive message in studies of barter, that overall shift to non-monetary transactions in transition economies is essentially the firms' response to (best feasible choice under conditions of) institutional breakdown. The presented above neoinstitutional approach, which is based on the notion of costliness of exchange, not only justifies the existence of such second-best exchange mechanism, but also provides analytical framework based on the concept of transaction costs. Now we can re-interpret barterization issue in terms of transaction cost economics.

Why barter? A sketch of the transaction cost approach

Empirical studies do not support any of traditional explanations of barter. These explanations seem to provide rather simple answers to the big question: "Why does the roughly half of the economy work beyond the monetary exchange system?" Let us briefly discuss the common explanations of barter proposed in the literature, and then, using the concept of transaction costs, try to outline a methodologically uniform approach that best addresses the issue.

Tax Evasion.

It is always tempting to explain non-monetary exchange as a device for tax evasion used by firms.

According to a study by Hendley, Ickes, and Ryterman (1998), firms treat the tax system as unfair, and have developed barter schemes as a way to escape taxes. However, evidence from the survey of 350 companies does not support tax evasion as a primary motive for non-monetary settlements. Although, barter and offsets are the most widely used instruments used by more than 90 percent of the firms in the survey, only about one-sixth of the firms regarded tax reduction as an important objective.

While enterprise managers could hardly be expected to acknowledge tax evasion, their responses are consistent with the provisions of the tax code. The Russian and Ukrainian tax codes are neutral with respect to cash and non-cash sales, that is, they do not distinguish between these forms of exchange when taxes are calculated. Another argument against the tax evasion motive is that barter prices are typically inflated above their cash equivalents. As business surveys


2 Ironically, the politics of tax redistribution between the regional and central governments also contributes to barterization. In attempt to cope with budgeting problems the former have to accept non-cash tax payments. Thus, in an effort to collect more taxes they promote non-cash settlements.

showed, prices that respondents charge on nonmonetary deals are slightly or significantly overvalued relative to the cash market prices. Consequently, this would obviously increase the value of tax duties.

**Using banking system as a tax collection agency.**

This argument suggests that the creation of kartoteka 2 system discouraged entrepreneurs from settling business transactions within banking system. Under this system, when an enterprise is in tax arrears, tax officials can block its accounts, forcing all its revenues into a special tax account. As a result, the marginal tax rate on cash inflows amounts to 100 percent. But even this role of banks as tax collectors does not seem to have been a fundamental driving force behind the rise and spread of non-monetary exchange. Banking practitioners and tax specialists indicate that there are many ways around blocked accounts. Firms can manage to open accounts in other banks. Moreover, they can open affiliated firm just for the purposes of one particular transaction. Thus, while the freezing of bank accounts may be an impediment, it is by no means a binding constraint to the use of the banking system as a mediator of payment.

**Opportunity cost to lending to private sector.**

Politicians often blame banking system for its focus on insider lending and excessive investment in government securities. Banks were not interested in lending to enterprises while a better alternative existed. Government debt obligations offered such high real yields that they crowded out private investment. However the decline in yields on government bonds that we observed last years was not followed with the decline in barter.

Lack of liquidity in banking system is also not a valid argument. According to recent business polls, bankers report that banking system is flooded with money, still they are not going to credit the enterprise sector\(^1\). The main reason they quote is weak debt enforcement.

**Survival hypothesis.**

The other arguments, namely, weak enforcement, disorganization, liquidity squeeze, and trade credit were best summarized in Commander and Mumssen (1998). At the beginning of their article authors emphasize that "their [barter and monetary surrogates] gradual emergence and subsequent proliferation points to behavior inconsistent with disorganization". Authors clearly point to the spontaneous self-organization as a result of survival efforts, at the same time, they agree that neither of arguments provides sufficient explanation.

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\(^2\) There exist more or less solid consensus on the definition of property rights as rights to freely exercise choice over an asset. This definition implicitly captures the idea that property rights is a broader concept than legal rights.

**Transaction cost approach and its contingencies.**

Why it is important to incorporate transaction costs into analysis? The answer is simple: because the choice making individuals (firms) tend to maximize their utilities (profits or else) **net of transaction costs**.

We can clarify a key message from the preceding theoretical discussion in the following way: as **economic agents choose the barter exchange and reject the monetary means of payment, there must be a comparative advantage (economy) in transaction costs within the existing institutional framework.** At this point, it is methodologically important to agree on definitions. The neoclassical treatment of transaction costs as the costs resulting from the transfer of property rights, as Allen (1991, 1998) argues, may cause the distracting analogy with taxes on transactions. The property rights definition of transaction costs, first articulated in Allen (1991), states that transaction costs are the costs of establishing and maintaining property rights\(^2\).

The neoinstitutional concept of transaction costs provides an opportunity to represent all explanations of barter in a single dimension. For instance, tax evasion can be treated as costly activity on securing property rights against government's coercion. Consequently, the arrangement of non-monetary exchange may give transaction cost advantage in this activity. Furthermore, we may include weak debt enforcement (high monitoring costs) that prevents banks from crediting into the list of factors that increase transaction costs of monetary exchange. At the same time, a weak inter-enterprise debt enforcement may have less costly solution in barter system, which looks like a sublimation of vertical integration. Obviously, it is possible that within different exchange systems the same institutional factor has different impact on the costs of establishing and maintaining property rights.

Except the methodological attractiveness of transaction cost-benefit analysis the new institutional economics may suggest additional contingencies for the research on barter, such as informal institutions. For instance, in the support of the vertical integration hypothesis of barter we can link relational contracts theme with the path dependence issue. Under the central planning there was no principal distinction between monetary and non-monetary exchange because markets for intermediate goods did not really exist. The whole economy worked like a single firm. There were established networks of trading partners for which the monetary transactions were no more than accounting counterpart to the flows of goods and services determined by planners. Many scholars of the communist legacy admit that old networks have not significantly
changed since the collapse of the communist rule. The sunk investment into relational capital that was already done during the Soviet era, gives an advantage in the relational contract enforcement now. Furthermore, a psychology can provide a meaningful insight into the choice making habits, which, in fact, do matter in relational contracts. It would be interesting to investigate how the behavioral patterns developed within hierarchical organization of the centrally managed economy, and preserved in the existing informal institutions, facilitate the conduct of relational contracts in the vertically integrated structure. To sum up the path dependence issue: there was little historical experience of monetary exchange, and there was much experience of barter. Consequently, there is little inherited institutional basis for monetary exchange, and there is much of it for barter.

**Rationale for policymaking**

The Hendley, Ickes, and Ryterman (1998) survey finding, as well as evidence from the EBRD-VTsIOM survey, indicates the extent to which non-monetary cash settlements are becoming institutionalized. According to the EBRD-VTsIOM survey, 93 percent of the sampled enterprises in Russia were using barter and offsets, and 3 percent were not using cash at all. Also, a significant number of companies reported that they used intermediaries or dealers in their most important non-monetary deals, indicating the extent of institutionalization.

The institutionalization of barter reveals firms’ preference to non-monetary rather than monetary form of exchange. From the neoclassical standpoint it looks irrational. Nevertheless, following the logic of economic choice rational economic agents choose among the alternatives on the basis of weighing their costs and benefits. So, the reality of transition economy leads to seemingly surprising conclusion that the costs of using money exceed “the prohibitively high costs of commodity exchange”. If we recognize positive transaction costs and decline the assumption about free and costless information, then we have to reject the absolute rationality of choice makers. This change from the neoclassical position engenders different and more realistic concept of bounded rationality. According to the new institutional paradigm, as individuals are endowed with scarce resources, they cannot possess full information. Consequently, they are rational to the extend it is allowed by transaction costs e.g. by “the costs of resources utilized for the creation, maintenance, use, change and so on of institutions and organizations”\(^1\). The economic problem then is to determine which institutional arrangement is “rational”, or economically preferable, under which particular circumstances. To put differently, what is treated by neoclassics as “imperfection”, neoinstitutionalists regard as the second best optimal solution.

This makes important difference in policy advice. Namely, institutional economists are not supposed to give any policy advice. The point is that instead of attempting to administratively prohibit barter transactions, policy makers should address the underlying institutional environment. It might be the case when harsh restrictive actions would destroy the existing transaction cost minimizing order, and force creative and innovative (although boundedly rational) individuals into the less efficient “third best” option\(^2\). Strictly speaking institutional design is not a policy object, it is rather a problem of social choice. For instance, we cannot implement effective and viable bankruptcy legislation until the complex interplay of electoral processes, political bargaining, and other social, and probably, cultural factors would make it possible. The new institutional economics is rather descriptive discipline and does not produce policy prescriptions. Yet, it has exceptional potential in explaining the puzzles of transition economies.

**Costs and benefits of economics “with human face”**

It is quite widespread in transition countries to name their celebrated reformers as “pragmatics” and “technocrats”. Why is it so? Intuitively we can guess, that this is an expression of the common belief that those policymakers are good in building macroeconomic models, and that they know what parameter values should be decreased/increased in the economy, or at least that they are partisans of such a technique. Such an expectation of the cooking book receipts emphasizes the domination of the normative approach in the economic policy analysis\(^3\).

In the recent literature on economic policy there is an ongoing discussion of the normative vs. positive approaches to the policymaking. According to Dixit

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1. Definition from the New Institutional Economics textbook (Furibotn and Richter, 1997).
2. Strictly speaking institutional design is not a policy object, it is rather a problem of social choice. For instance, we cannot implement effective and viable bankruptcy legislation until the complex interplay of electoral processes, political bargaining, and other social, and probably, cultural factors would make it possible. The new institutional economics is rather descriptive discipline and does not produce policy prescriptions. Yet, it has exceptional potential in explaining the puzzles of transition economies.
3. Dixit (1996) wrote about such a technical approach to the policy analysis: “Much of the theory, and almost most of the practice of economic policy analysis views the making and implementation of the policy as a technical problem, even as a control engineering problem. One starts with a model of the workings of the economy, along with some degrees of freedom, or some instruments of policy intervention. Then one assumes an evaluation criterion. Finally one calculates the values of the instruments that will maximize the criterion, or directions of change that will improve the performance as judged by the criterion. These policy choices, or reforms, are to be recommended to the government or offered in public discussions as the right choices.”
(1996), the former is mainly about "economic engineering" that abstains from the political process by assuming the government as a "single welfare maximizing principal", and designs economic policy as a set of single acts. The latter is formed around the political process of exercising social choice, and is concerned with "constitution for economic policy" rather than with individual instances of policy making. The core distinction between these two approaches is in the relevance of social institutions in the economic analysis technique. If we recognize the "human dimension", then our analysis becomes more complicated with uncertainty associated with political process. The more uncertainty in the political process is admitted, the less confident in policy acts we are.

In order to avoid prohibitive complexities in the models economists introduce assumptions. Then, it is impossible to escape methodological problems with the validation of the analytical outcomes. Blaug (1992) summarizes these problems in the following questions: "What is the relationship between the assumptions and predictive implications of the theories? If economists validate their theories by invoking factual evidence, is that evidence pertinent only to the predictive implications of these theories, or to their assumptions, or to both?"

In the traditional economic theory institutions and organizations are implicitly assumed to exist, but explicitly do not appear in models. Such a generalization substantially simplifies the process of economic modeling. Consequently, in the absence of transaction costs, the selfish motives would always guide to establish political structures and systems of property rights that maximize the national wealth. However, the sacrifice for the possibility to build models is too big. The models built on fundamental neoclassical assumptions are inherently artificial due to their omittance of institutional component. Furthermore, the farther this component from the assumed ideal, the more built-in bias is present in such models. This is the reason why some models that worked well in the developed countries may have low explanatory power for transition economies.

The growing field of economic theory, new institutional economics, presents an attempt to approximate economics theory closer to the reality, and to build the economic theory "with human face". Obviously, it is fairly attractive due to its explanatory potential for the transition countries with the distorted institutional environment. Ironically, accepting this theory in sought of more realistic and consistent explanations, we have to forget about the policy advice,— at least in its traditional meaning,— only the generalized policy rules and strategic directions could be suggested to policymakers.

Conclusions

The hardships and shortfalls of the reforms in post Soviet countries engendered the number of questions concerning the theoretical and policymaking approaches. Institutions become central in economic analysis. Moreover, the theory of transition is all about institutions. The prevalent feature of former planned economies is an adjustment of economic behavior to the distorted and inadequate institutional environment. Under such conditions economic agents seek the second-best solutions,— thus we should be careful in labeling the observed form of economic organization as inefficient. Consequently, the economic policy receipts to the problems may not be obvious.

From the standpoint of neoinstitutional economics, barter exchange could be viewed as an alternative second-best solution to the problem of high transaction costs associated with monetary exchange. That is why the central questions of analysis are: Where is the transaction cost inefficiency and how it could be corrected?

Although, the path dependence issue is underplayed in the literature, it can substantially advance the institutional analysis of transition phenomena, especially in the former Soviet Union countries that have long history of communist rule. In particular, the informal institutions of barter economy that have been preserved since the collapse of the planned economy may contribute to the transaction cost advantage of barter in disorganized post Soviet economy.

Undoubtedly, the openness to the all kinds of knowledge about choice and choice makers expands the scope of analytical opportunities provided by the new institutional theory. The economic analysis augmented with a human dimension may give a more realistic picture of the world. It obviously provides superior methodology, however, its utility for the policy prescriptions remains controversial.


