

Research Article

Reasoned Economic Innovations for General Equilibrium Competition

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Abstract

When some win, others lose, and this is a natural competitive process in an equilibrium economy. With objective competition of general equilibrium, maximum efficiency and optimal use and redistribution of resources are achieved. But some hidden external and internal monopolies interfere with such equilibrium in the microeconomic markets sectors, including entire regions and industries. Accordingly, equilibrium competition is disrupted, which requires adequate unexpected innovative protective mechanisms of the state and the international community. If government economic departments or corporate management watch all criminal activity of hidden monopolies with their hands folded in pockets, a temporary disruption of effective equilibrium competition could lead to protracted stagnation and “thrombotic shocks” in local and international markets. For an example of applying the above in practice, when predatory monopolies import agricultural products at artificially low dumping prices, which ruins even very successful local businessmen, it is necessary to establish import-substituting free zones with a reasonably calculated minimum tax to stimulate exports. In objects to recommend innovative economic (fiscal-managerial) mechanisms for maintaining effective equilibrium competition, in the article, using the methods of grouping and summarizing statistical data, a preliminary assessment of countries in need of international and government support was carried out and results were obtained to improve the proportions in the core of market competition and for ease the burden of reasoned free zonal taxation.

Keywords

General Equilibrium Competition, Market Sector, Tax Mechanism

1. Introduction

Nature has distributed resources in such a way that all countries have their own certain advantages and wisely constructed mutually beneficial relationships can form equilibrium balances of exports and imports. But due to the influence of the hidden monopolies we are studying, this important balance in some cases is disrupted so that imports are not a few percent, but several times higher than exports. This causes chronic high unemployment with poverty.

I think a lot about where to start quickly, in this case?

As we know, according to Phillips's analysis (Figure 1) [16], in this case, unemployment can be reduced by an increase in inflation (accordingly, Money Wage Rates), but my research has shown that such a relationship is possible in the short term and very rarely and more often, unemployment and inflation occur simultaneously.

Moreover, according to my observations, long-term deflation causes more unemployment (Figure 2), and this is especially noticeable if we are dealing with dumping prices of

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predatory hidden monopolies.

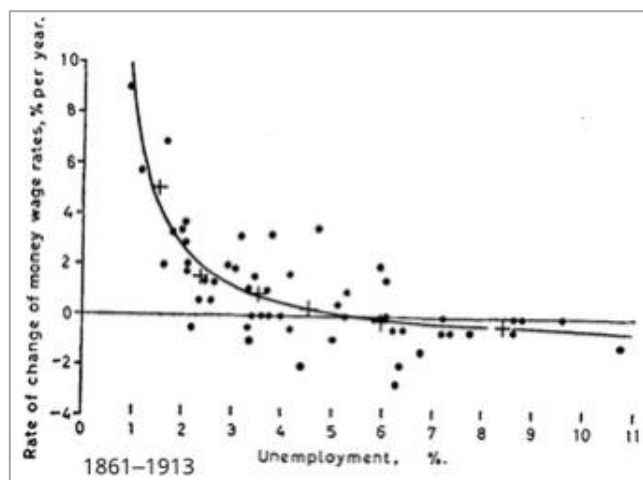


Figure 1. Phillips Curve.

Source: Phillips A. Relation between Unemployment and the Rate of Change of Money Wage Rates in the United Kingdom, 1861-1957. <https://doi.org/10.1111/j.1468-0335.1958.tb00003.x>

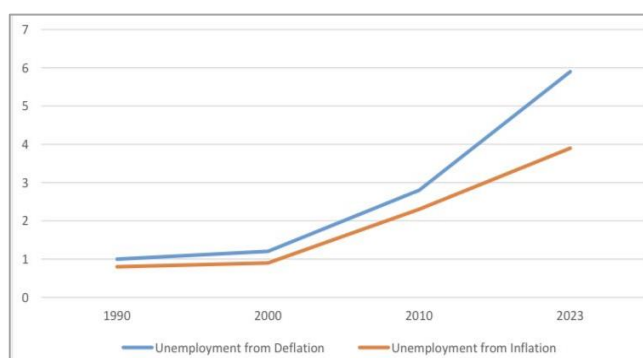


Figure 2. Inflation-deflation and unemployment.

Source: Author's estimates of the world economy 4230 cases (1990-2023). The impact on unemployment is determined in percentage points by elimination in multifactor analysis with expert approximate calculations. The increase in unemployment in 2010-2023 was to a certain extent caused by the pandemic and the increase in international conflicts.

Deflation is always similar to a decrease in a person's temperature, and inflation is like an increase in temperature, and we need to know that a decrease in temperature more quickly leads to the life problems of a person. Even if some win and others lose, the difference in costs makes it possible to always find mutually beneficial effective mechanisms in the economy and logically, economists should think deeply about the problems of dumping hidden monopolies and look for effective mutually beneficial ways (for countries or state incomes and businesses) to eliminate them.

2. Methodology and Literature Review

The aggravated problem of the economic recession in the world due to the pandemic and many major military conflicts made me think seriously about the primary measures of economic behavior and for this, in the face of a lack of statistical data, to the necessary application of well-founded theoretical conclusions in practice, I included my long-standing rough expert estimates (from 1986 to the present) for reliable prognostic extrapolation. In multifactorial economic analysis, even the laws of physics, mathematical formulations, tools for grouping available statistical data and generalizations of a neuro-economic nature were used.

At determining the maximal and optimal efficiency of economic competition, I used the approximate analogy of Atomic model and Ohm's law of electric current $I=V/R$ [11], where under "I" meant by me the bright (needed optimally) force of competition, "V" - the market capacity and "R" - the resistance of the largest supplier. For calculation of competition efficiency not only by proportion of market core, I used my formula: Competition Level=Market efficiency/Weighted average share of companies in the market by $\sum (S_i V_i)/V$, where S_i - market share of i company in %, V_i - i company volume in \$, V - total market volume in \$. My formula complements the Herfindahl-Hirschman Index [4] with the necessary connection of market efficiency.

In the article, I deepened the ongoing research into the cores of homogeneous free markets using the examples of the USA and China [12]. According to my reasoning, economic equilibrium [2, 6, 15] is also necessary in competition, I call this equilibrium competition. Previously, in classical economic theory, as we know, perfect competition was considered mainly by the number of competitors, which, in my opinion, is disastrously bad. If we divide bona fide large producers into parts in the domestic market, we will get called by me "an ant economy with a short circuit of economic overheating" and open the way for secret large monopolies to enter the domestic market. In addition, we must understand, as I noticed for the first time after reviewing the literature on this topic, that the structure of the atom can understand the essence of perfect competition and we can have perfect equilibrium competition with two almost equivalent competitors, and a market with many competitors can be deformed by secret collusions and unevenness prone to monopolism.

In determining the maturity and efficiency [19] of the economic structure and the corresponding warming and cooling sectors in the economy, I used logarithmic calculus by the entropy method [25, 13] and complemented an excellent methodology of the European Commission experts [5] in determining the effectiveness of structural changes. I explore the role of the structural factor, the role of the factor of individual sectoral efficiency and their joint action. We began this research during my student reflections in the 80s of the last century and came to the conclusion that we must have the desire for both self-knowledge of our best sides and univer-

salism to maintain independence. Humanism and globalization are the best sides of the modern world, but this should not wash away our identity.

The originality of my approaches to equilibrium structural reforms, in contrast to the above-mentioned literary sources, is also expressed in the fact that I place special emphasis on the importance of territorial (zonal) - regional approaches. So, for example, if an economy has a mature sectoral economic structure, that is, such an economy has sufficiently evenly developed almost all sectors of the economy, due to the high concentration of production in the center, such an economy may have backward regions of “extreme economic cooling” and extreme poverty on the periphery, especially in the mountains.

In the opposite case, if we have a perfect regional (zonal) structure of the economy, that is, all regions are developed quite well, then in the absolute majority of cases, such an economy also has a perfect sectoral economic structure. Based on this, we are in favor of additional stimulation of “warm” regional zones of a small - “spot” scale and, through additional income from them, solving urgent problems of macroeconomic sectoral imbalances.

Moreover, we do not share the view that universal benefits can make the economy more efficient and attractive. Universal, unreasonably large benefits deplete the state budget and multiple health and educational problems remain unresolved, and the legal order that protects people and perfect competition is vio-

lated. “Micro-Targeted” benefits in developed areas are more attractive to investors and produce tangible results.

Financial management and public sector (government finance) specialists in developed countries [1, 7, 9, 17, 22] are exploring ways and mechanisms for growing state revenues and optimizing spending, where targeted application of the practice of import substitution zones can significantly help.

Famous authors [8, 14] already wrote many interesting about studied in the article free zones, but I think that each modern or future specific situation requires meticulous calculations to determine the most optimal tax burden.

3. Results: Solving the Problem

Everything in the world is interconnected and balanced, but some people, sometimes, with their unreasonable behavior, interfere with the flow of natural processes. In the modern world, there is a warming of climate conditions, which are often accompanied by noticeable cooling in the winter. As well, by estimates of IMF, WB and CIA, I got natural results (Table 1), that there are far fewer successful countries in the world economy than lagging behind average countries that require fast and more strong international support to export-import equilibrium balances and protect honest competition. And so it was both in the distant past and in the present times.

Table 1. Percent of total countries in the world below average by GDP PPP.

N	Estimator	% of Countries
1	International Monetary Fund	60.4
2	World Bank	60.9
3	Central Intelligence Agency	60.4

Source: [https://en.m.wikipedia.org/wiki/List_of_countries_by_GDP_\(PPP\)_per_capita](https://en.m.wikipedia.org/wiki/List_of_countries_by_GDP_(PPP)_per_capita) Viewing time Oct 17, 2023.

With physical-economic observations and calculations by practice on the world economy, I have found very interesting results (Table 2), that countries where, at the core of the market,

the proportion between the largest supplier and the second large supplier is closer to the equilibrium 1:1, are much more efficient than countries with a proportion of 2:1, 3:1 or more.

Table 2. Competition efficiency by proportion of market core.

N	Group of countries by proportion between the largest supplier and the second large supplier on markets	Efficiency
1	Countries near to 3:1 ratio	1
2	Countries near to 2:1 ratio	1.44
3	Countries near to 1:1 ratio	1.78

Source: Author's estimates of the world economy 5950 cases (1990-2023).

In market cores damaged by hidden monopolies, effective equilibrium competition can be restored using the tax mechanism of import-substitution free economic zones. I have been researching this issue since 1986 and over this long time, I have come to the recommended level (Table 3), that the tax in a free economic zone should not exceed 0.5% of gross revenue.

Table 3. Efficiency of free zones tax level.

N	Tax level	Efficiency
1	3-6% of gross revenue	1
2	0.5-3% of gross revenue	2.1
3	0-0.5% of gross revenue	7.2

Source: Author's estimates of the world economy 432 cases (1986-2023).

4. Discussion & Conclusion

In the coming almost fully electronic - maximally transparent era of market relations, I think we should use targeted mechanisms of free zones as flexibly as possible in areas of effective priorities. If tax benefits are distributed throughout the territory, the desired effect will not be achieved and, on the contrary, state budgets will lose significant funds for the necessary activity to medicine, education and culture, public order, etc.

Free import-substitution zones with up to a half percent tax can become catalysts - economic greenhouses of growth. According to my calculations (Table 4), if in each country, to further stimulate local priority regions and industries, import-substitution zones are created, due to the growth of economic turnover, despite tax cuts, budget revenues can increase on average by approximately 2-3 times (our effect will be best if we additionally apply practice of negative -1% loans in the initial 5-year period).

Table 4. State budget revenues.

N	Tax level	State budget revenues
1	3-6% of gross revenue	1
2	0.5-3% of gross revenue	1.0-2.0
3	0-0.5% of gross revenue	2.0-3.0

Source: Author's estimates of the world economy 184 cases (1994-2023).

In modern America, free port trade zones are effectively supported, in Europe - warehouse refrigerators at airports, in China - regional-industrial spaces with minimal tax on profit. I am developing a theory according to which micro-regional priorities are more stringent and necessary criteria for assessing a perfect - mature equilibrium economic structure than micro-sectoral ones. My arguments are based on my assumption that if we properly - naturally arrange territorial clusters with the active participation of local authorities, banks and universities, we will get an effective sectoral structure of the economy too. In the opposite approach, we do not always get the desired effect. "Warm" - greenhouse conditions of traditionally successful pin-point import substitution zones (PISZ) in the economy are able to overcome the crisis "cooling" in backward regions and industries. Discussing with famous authors [7, 8, 14], I think, that PISZ can be especially relevant for countries with significant export-import imbalances and when introducing PISZ original mechanisms (focused not on utopian goals, but on own real capabilities and experience of the most successful management), it is necessary to make maximum use of local advantages that can attract the consumer with their uniqueness and urgent need.

For general equilibrium competition, we consider it appropriate to especially emphasize the importance of protecting competition through universal - international efforts. Even the economically strongest countries are not able to withstand the pressure from hidden monopolies, which often have universal roots. We began publishing a series of theses on researchgate.net to support INTERPOL and the creation under its wing of an international antitrust agency with the participation of at least 5 major scientists from each country who will specialize in protecting perfect competition and local and global markets. In addition, international monitoring services must have sufficient financial and military resources to quickly resolve local conflicts. I am confident that the common mutually beneficial interests of all countries will speed up the resolution of increasingly frequent conflicts.

I also suggest that the international scientific community concentrate on competitive zonal-sectorial management approaches rather than on utopian goals. Having goals and striving to achieve them is not a bad thing, but unreasonable goals are often not fulfilled and can cause complications of a depressive nature and long-term economic cold. It is better to know own advantages well than to try to remake yourself in order to comfortably achieve an unrealistic goal. As an example that is easy to understand, I would like to note that if a talented promising basketball player suddenly wants to become a football player or boxer due to high income, if he does not have the corresponding talents, he will lose entire future, including basketball prospects. We need the most beautiful long-range basketball hits and jumps in the innovation economy to quickly solve the demographic problems of some economically "cooled" regions.

For an exemplary summary, we can cite joint public-private

management for acute problems with minimal costs. If the state sends only 2-3 medical specialists to deserted highland regions to create mini-outpatient and maternity houses even in some abandoned offices, young people will begin to stay to rural areas. In addition, in case of complex painful cases, it is possible to use a transport fleet from the main and regional centers of the country and to evacuate the patient to the capital. Doctors sent by the state can spend their free time collecting unique herbs from the highlands for the production of medicinal drugs and relieve the problems of export-import imbalance.

Such seemingly mini-projects can solve the most complex economic problems and will most quickly solve brilliant geopolitical plans and recommendations [10, 3, 20, 21, 23, 18, 24] for the care of our unique flora and fauna throughout the developed and developing planet, environmental protection, zero greenhouse gas emissions, the use of energy-saving technologies, optimal transition on to renewable energy sources.

Abbreviations

PISZ: Pin-point Import Substitution Zone

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Conflicts of Interest

The author declares no conflicts of interest.

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