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# NOONOMY, GLOBALIZATION AND PANDEMICS1

**Abstract.** The author focuses on the differences in economic systems between countries with balanced and sustainable industrial systems and countries with fragile systems in his study. These differences are under analysis from the perspective of assessment: planning system, wants, globalization, the COVID-19 pandemic and the related crisis. Lastly, the author concludes that countries that have not made the transition to advanced systems of financial relations have been the most successful in maintaining the viability of their economies against the backdrop of a global pandemic.

**Keywords:** noonomy, simulacrums, production, globalization, supply and demand, pandemic, world crisis

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# 智力经济、全球化和大流行病

摘要:作者的研究重点是工业体系平衡和稳定的国家与工业体系脆弱的国家之间的经济体系的差异。从以下角度探讨了这些差异:计划体系、需求、全球化、新冠大流行病和相关危机。作者得出的结论是,在爆发世界性大流行病背景下,没有过渡到先进金融体系的国家,在保持经济活力方面取得了最大的成功。

关键词:智力经济、模拟、生产、全球化、供需、大流行病、全球危机。

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#### Introduction

"Noonomy," in the usage of Professor Bodrunov (Bodrunov, 2018), describes the potential development of an industrial system that is fit-for-purpose, in the sense of meeting the essential requirements for a just and civilized society given the possibilities of technology and within the

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limits imposed by the environment. In this system, productive processes will be largely free of direct labor inputs, and society will be largely organized on principles different from the narrow economic criteria hitherto in use.

In some narrow respects, the world as a whole has been moving toward noonomy for some time, through industrial restructuring and automation, thanks to the rise of digital and solid-state technologies and corporate strategies for cost control. Many workers have already been displaced. But neither justice nor civilization nor the environment are served by this process as it stands; it is instead unequal, in some ways brutal and ecologically destructive. And while a large majority of those displaced have found employment in the services sector, with only a relative few forced to rely for the long term on the meager support of the welfare state, the Covid-19 pandemic has exposed the fragility of that employment, and the inability of the system as presently constituted to survive the radical changes in behavior induced by a severe threat to public health. It therefore points toward the steps that will be required if the potential for a sustainable noonomy is to be realized.

## The Planning System

Whether national, continental or global, an economy with a knowledge-based industrial sector necessarily conforms to the framework of industrial organization and control laid out in the work of John Kenneth Galbraith in *The New Industrial State* (Galbraith, 1967). There is a Planning System, centered on the industrial corporation, that undertakes market research, product design, the engineering, financing and quality and cost control of the production process. The corporation interfaces with its customers, its employees, the public sector and the financial sector, and works to coordinate and control the behavior of each in order to best advance the interests of the corporation as perceived by its management and directors. Since the Planning System at the level of the enterprise remains the crucial actor in the production process, the determination of its interests becomes a central question.

The interests of a large industrial enterprise are determined in part by the political, legal and ideological environment in which it operates. A differential perception of interests distinguishes long-term going concerns responsive to public purpose from entities whose primary objective is the maximization of shareholder value in the short term and the compensation of corporate leadership.

Notoriously, in the United States and United Kingdom, the adoption of shareholder value as the primary criterion of performance, beginning in the late 1970s under the influence of neoliberal economists, led to the erosion of the long-term viability of major firms, much as nomenklatura privatization brought on looting in the breakup of the USSR. But in other countries, and most notably Germany, Japan, Korea and China, the Planning System has continued to function in the interest of the long-term viability of industrial corporations as going concerns, and these countries have retained and developed their technological capacities in a cumulative process through time. It is worth noting that in each case, the Planning System of the corporations exists in a structure of countervailing power (as with the trade unions and other social partners in Germany) or in partnership with government agencies (as in Japan and Korea), or even, as in the case of China, with state ownership of many of the key enterprises. To some degree, these enterprises are responsive to social and environmental pressures, but their main concern continues to be as Galbraith postulated: in their own stability and growth.

Indeed, even maintaining the stability of the industrial system has required creative steps, imperfectly taken. The construction of an economy built around advanced manufacturing necessarily entails a world in which only a small fraction of the employable workforce can be absorbed in manufacturing activities, while a much larger fraction must seek employment in other domains or means of subsistence without being employed. This fact applies to all manufacturing economies, but it is most prominent for those high-wage countries that are actively shedding manufactures to lower-wage trading partners, and most aggressively implementing labor-saving technological change. In these countries, the share of the labor force employed in high-wage manufactures has plunged. The challenge for the Planning System, even otherwise unconstrained by public purpose, is to ensure that there is both demand and supply for the services that support the incomes of the mass of working people not producing physical goods, in order that there may be adequate demand for the physical products of the Planning System. For social and political reasons, with the important but limited exception of the elderly, supported by Social Security and other public retirement schemes, it is not broadly acceptable merely to guarantee incomes to all who need them. So the Planning System has had to foster an economy in which actual employment is widely available outside the goods-producing sectors.

# Simulacra, Superfluities and Frills

The key to job creation in the post-industrial proto-noonomy has been to foster demaand and supply of goods and services that inessential or superfluous, in the sense that they may be forgone without grave loss to welfare; goods and services meeting this description may be described as "simulacra," insofar as they meet needs that are not real needs, but confected desires.

The distinction between the essential and the inessential, lost in neoclassical economics, has its roots in the classical dichotomy between productive and unproductive labor, and in the concepts of pecuniary emulation and conspicuous waste advanced by Thorstein Veblen (Veblen, 1899), as well as his division between the industrial and the leisure class. Thus for Adam Smith, who adapted the earlier framework of the Physiocrats, servants, soldiers, clerics and most public functionaries were "unproductive," and so were maintained out of a surplus produced through the diligence of farmers, craftspeople and the merchants who organized 18th century British economic life. While for Veblen, the leisure class preoccupied itself with the flamboyant consumption of luxuries and display of wealth, including the maintenance of expensive suites of retainers and servants, all of whom consumed the products of the industrial classes.

In the postwar era, increasing labor productivity meant that the potential for a Marxian "crisis of realization" had to be dealt with. To keep up the demand for its outputs, the Planning System pursued the design and marketing of simulacra in a multiplicity of forms. Initially this consisted, largely, of an increasing diversity of consumer products, their virtues insistently advanced by advertising, a topic well-explored by Galbraith (Galbraith, 1958). But more recently, the process of creating simulacra has moved on to services. Thus we see the conversion of simple and previously routine actions – such as exercising, or coffee-drinking, or shopping for food and clothing, or pursuing higher education or elective medical procedures – into expensive forms of discretionary consumption, such as can underpin substantial elements of economic life. And so it is in the services sector, not the goods-producing sector, that simulacra have been recently most prominently developed, and that most job seekers in the advanced economies have until recently found employment.

# **A Tripartite World Economy**

The process of globalization has thus brought into being a tripartite world economy, first analyzed in Galbraith (Galbraith, 1989: 14). At the lowest level are those countries that are largely confined to the supply of commodities on the world markets ("Resource-Based Economies"), from cotton and cocoa to copper and cobalt, and of course oil. Such countries have a long-standing and traditional economic structure; they must depend on the outside world for manufactures, for investment goods, and for the basics of medical provisioning; their capacity to pay is limited by the price they can receive for the commodities they produce. Short-falls are covered by debt, and periodic debt crises are endemic for countries in this position. These countries are also radically unequal, with the divide being between landowners and tenants, or more broadly those who control the flow of resources and those who do not. Exceptions exist – Cuba comes to mind, and Norway – but they are rare.

At the top level are the countries ("Leading Technological Powers") that supply advanced technological products, capital goods and financial services to the world. These countries typically enjoy high living standards and high real wages thanks to strong currencies and the capacity to import both commodities and consumer manufactures at prices that the broad mass of their households can afford. Their economies are however marked by distinct business cycles, thanks to the cyclicality in global demand for advanced capital goods, and by very large inequalities, owing to the extraordinary capital valuations attained by advanced technology firms, accruing to very small numbers of people, and to the potential for profit and predation in the financial sector. Since labor-intensive manufacturing is largely removed to other locations, the great mass of jobs in these economies are in services, rooted as argued above in the fostering of novel desires and the conversion of routine activities into expensive formulae for the consumption of time.

In the middle tier, we find those countries ("Intermediate Manufacturing Powers") that provide the manufactures to the consuming households of the world, generally importing both capital goods and commodities. These societies tend to be relatively egalitarian and also relatively stable – their principal vulnerability is to fluctuations in demand for their exports and in the prices of their raw materials. Living standards are comparatively modest, but with a tendency to improve over time as the quality of goods improves and costs of production decline. Such countries are also in the position of importing technologies from their more advanced partners, as well as improving their own capacities. They thus pose an implicit or explicit threat to the material dominance of the incumbents in the top tier.

## **Covid-19, Economic Structure and Economic Models**

The Covid-19 crisis has brought these differences into focus. It has differentiated countries with balanced and robust industrial systems from those with unbalanced and fragile systems. It has exposed the elements of superfluity, which are sources of economic fragility. It is revealing the consequences of precarity and inequality in the provision of those goods and services, including public services and amenities, that are essential to a civilized, secure and satisfactory life. It has specifically shown that the most globalized economies, those whose structures are most oriented toward a global division of labor and therefore most dependent on simulacra and superfluities in the support of home-country employment, are the most fragile under the conditions of a global health crisis.

Mainstream economics pays little attention to such questions of structure. It treats all consumer spending as driven by equally valid wants, therefore equally necessary; the distinction between "essential" and "superfluous" does not exist. It ignores, by and large, the burden of debts, and overlooks the role of the global as opposed to the local sources of demand for capital goods. Thus to many mainstream economists, the pandemic was a shock – like an earthquake or the 9/11 attacks – to an economy whose major features are all internal, and which can be modeled in a fashion essentially identical to that used for any macro-economy whatsoever. From this perspective, Covid-19 was an interrruption in an otherwise prosperous and stable expansion, long past the phase of "recovery" from the previous debacle, the financial crisis of 2007-2009. It came as a surprise, which suggests that there was no prior underlying problem. The aftermath can therefore be expected to resemble the economic recoveries of the past.

So to get an economy "moving again," in the mainstream view, what is mainly necessary is once again "confidence" – for consumers return to spending, to use their "pent-up demand," perhaps with the help of a distribution of dollars from the public fisc. In the United States, the Congressional Budget Office (Congressional Budget Office, 2020) is explicit in relying on the consumer, and not business or government, to drive the recovery that it expects to begin soon. With support for incomes producing increased consumption, this eventually prompting an increase in business investment, CBO generally expects a full recovery over time. We may call this the "shock-stimulus" way of thinking. It is consistent with the way American mainstream economists and center-left policy makers have thought about recessions and recoveries since the Kennedy-Johnson tax cuts of the early 1960s. It accepts the idea that consumer desires are unlimited, that household consumption is constrained mainly by income, and that the growth path of the economy as a whole is a predictable function of population and incomes.

## The Covid-19 Crisis in the United States.

Real GDP in the United States is expected to fall 12 percentage points, the Congressional Budget Office (Congressional Budget Office, 2020) predicts, in the April-June quarter of 2020, or at an annual rate of 40 percent. Given the role of imputed values in the calculation of GDP, about 15 percent of the total, this would represent a decline of about half in actual cash transactions. Moreover, much of the remainder counts as fixed costs, such as for rent, utilities, and government spending; when one takes these into account the rate of collapse in the second quarter, had it continued for a full year, would have nearly eliminated private economic activity in the country. As things stand, visits to physical businesses appear to have fallen by more than half. The fall was probably arrested in the third quarther by the combination of "stimulus" and "reopening," and a partial rebound is likely when those data are published. But even in the best case scenarios, US GDP will remain well below the levels of early 2020 a year hence, and unemployment of between ten and twenty million persons a fixture of the landscape.

The shock-stimulus model just described projects a steady recovery from this debacle over four or five years. But this ignores the three features of the US economy that have changed as the United States evolved into a fully-globalized Leading Technological Power over the course of the past half-century. They are the globalization of industry itself, the rise of simulacra concentrated in services (and relative decline of goods) in consumption and employment within the country, and the rising burden of personal and corporate debts.

In the 1960s, the United States had a balanced industrial economy. It produced goods for both businesses and households, at all levels of technology, with a fairly small (and tightly regulated) financial sector. It produced largely for itself, importing mainly commodities, although it also produced a large volume of its own commodities. This balance no longer holds.

The United States and the United Kingdom are today leading examples of countries that built globalized economies centered on finance and advanced technology industries, such as aerospace, armaments, information technologies, energy services, advanced pharmaceuticals and the like. They correspondingly import a great share of their ordinary consumption goods, including clothing, consumer electronics, appliances and automobiles and automotive parts, from Asia but also Germany and its near neighbors in Europe, and from Mexico in the case of the United States. Specialization is a feature of globalization, and the prominence of finance and technology also means a concentration of incomes and wealth, yet in societies where real living standards are maintained for many by the strong position of the national currencies, which have permitted large-scale importation of inexpensive consumer goods from developing countries.

Second, with rising incomes and new technologies there has been a change in the composition of household spending. In the 1960s, the American consumer (and her British counterpart, to a lesser degree) was still expanding her stock of household basics. Cars, televisions, kitchen and laundry appliances were the driving forces of demand, as everyone wanted what all the others were buying. A stock of physical possessions of good quality and modern design indicated social status; to lack them was a significant marker of economic failure. Today, the low cost of durables made in countries with much lower wages has diminished the status-content of such purchases. This has freed up incomes for services, from restaurants and bars to resorts and casinos, salons, gyms and trainers, salons, coffee shops, massage therapists and tattoo artists. Higher education and even shopping are likewise to be considered, not solely as investment in "human capital" or (in the case of shopping) as a chore, but as, in part, leisure-time and status-seeking activities. These are the simulacra, the activities on which many millions, from college professors to checkout clerks, have relied for jobs and income. The problem is that, being largely simulacra, these activities are also superfluous, in the precise sense that they may be forgone with no grave harm to the buyer. People may have enjoyed their nights out, their shopping, their manicures, massages and tattoos, but these items are not needs; they are pleasures and luxuries and they may be foregone.

Third, in the 1960s, American household spending was powered by rising wages, and also by growing equity in homes as inflation drove up house values in relation to fixed-rate mortgages. Neither is true any longer. Wages are largely stagnant since at least 2000, while gains in spending have been powered by debt, both personal and corporate – the latter oriented toward stock buybacks, pushing up corporate equity valuations and hence the purchasing power of high-net-worth households. House values, a major source of middle-class spending power, were hit by the 2008 crisis; lending against houses since then has no doubt diminished net equity, and increased the vulnerability of middle-class net worth to a decline in home values. Meanwhile a paucity of truly public goods, such as parks, libraries, security, clean air and potable water, especially in low-income communities, drives home and aggravates the inequality in private incomes.

In the Covid-19 crisis, the demand for advanced investment goods has collapsed. With air travel down by over 90 percent, half or more of all aircraft are parked on the ground. There will be little demand for new planes, and the major producers – already in trouble in the case of Boeing –

are curtailing new production. For many other advanced goods, the demand collapse is a global phenomenon and national policy can do nothing, short of nationalizing the production lines, to stop it. But there are effects that are purely domestic as well. Drilling of new oil wells in the Permian Basin has stopped as those already drilled are unprofitable at present prices. Commercial offices stand empty, shopping malls are closed, so there is no need for construction of new ones.

On the side of households, faced with a radical increase in uncertainty, saving rises and spending falls. Households will save more even if the government replaces their lost incomes for a time. People know very well that stimulus is short-term. They know that job prospects are bleak. They expect their homes to lose value and their credit ratings to decline. They will cut back on things they do not need, in order to be prepared to provide the things they really do need. With less commuting, cars last longer and fewer new ones will be made and sold. Even in health care, some 18 percent of (normal) US GDP, demand for services is down, since with time off and an absence of routine accidents, the health of the uninfected population has improved and the desire to pay for health services, such as tests and diagnoses, even among those who need them, has declined. Some of the activities that previously drove the economy, such as sporting events, conventions, concerts and other mass gatherings, have been canceled and remain so for health reasons. Restaurants, bars, clubs, salons, retail stores and the like are being permitted to open, usually under restrictions to fifty percent or less of capacity. Airlines are flying, but with their middle seats empty and in many cases the rest of the plane as well.

The people who run restaurants and airlines have two problems. One is that they can't cover costs with their capacity limited for health reasons; these are businesses with low margins that survive in ordinary times by packing people in. But the other problem is more fundamental. It is (once again) that very few people, in America at least, need these services as a condition of decent life. Middle- and upper-class Americans, the major repository of national purchasing power, can if necessary eat, drink, socialize and take their vacations at home. So under the circumstances demand would be down, even if the coronavirus went away. This explains why many services are not reopening even though they are legally permitted to do so. The tragedy of it is that without them, millions of jobs will not come back either. Analysis of the patronage of businesses in the United States, derived from surveillance of foot traffic, supports this analysis. It reveals that the flow of activities has not recovered substantially at time of writing (in September, 2020), despite a very large replacement of income and the passage of time since the initial pandemic panic took hold.

Finally, though incomes and jobs are lost, household debts have continued to mount: rents, mortgages, utilities, interest on loans for cars, education, and ordinary expenses. Stimulus checks have helped for now: defaults and arrears have been modest, and many landlords have been accommodating. But as people face long periods with lower incomes, they will continue to hoard funds, to be sure to meet their fixed debts. To all this, one can add the plight of state and local governments, which rely on taxes raised on sales and incomes. As these collapse, the response is to cut spending and curtail services, compounding the loss of jobs and incomes. Massive intervention by the Federal Reserve, the interruption of investment projects and the rise of savings together explain the rise in the stock market after the initial panic: both companies and wealthy persons had money to place, no desire to spend it, and were not keen on leaving it at zero interest in the bank. This development, while reassuring to those who own capital assets, has no important implications for the recovery of the economy as a whole.

None of this is the consequence merely of incompetence under President Donald Trump. I It is the result of systemic changes in the US economy over 50 years. The US has built an economy based on global demand for advanced goods, on domestic consumer demand for frills, and on ever-growing household and business debts. This is not short-term or reversible in the course of few months or years. This market-driven economy was in many ways prosperous and successful; it was efficient, it delivered what people wanted, it had eliminated unemployment without bringing inflation, and many millions had jobs and incomes. But it was a house of cards, and the wind of the coronavirus has blown it down.

## The Pandemic in Asia: the case of Intermediate Manufacturing Powers

Meanwhile, on the other side of the world, we find economies that have not collapsed in the pandemic. Some of these, such as China and Vietnam, are nominally socialist. Others, such as Korea and Taiwan, are ostensibly capitalist. All experienced relatively low death tolls in the end, with varying degrees of popular mobilization and lock-down required to achieve this objective. All were able to muster and make use of a broad solidarity and a will on the part of large and densely-settled populations to do the job. And all survived the pandemic with manageable levels of economic damage.

Focusing strictly on the economics, what they share is more important than the ideological and historical issues that divide them. All four have national economies rooted in manufactures, the product of a concerted industrial development strategy, having retained most of the core industries providing basic consumer goods. They achieved this with a combination of stable advanced industrial firms, with long-term perspectives and assured financing, in the model of the American industrial corporations of the mid-1960s, and also large sectors of small enterprises producing low-technology consumption goods such as garments and paper products. Thus they were not suddenly short of medical supplies and protective equipment when global supply chains were disrupted, or were able rapidly to make up shortages that did occur. Chinese production of face masks rose from 15 million to about 110 million per day over three weeks in February, as 3,000 SME's converted production lines. These economies import advanced capital goods, and they import commodities, but they are well-positioned to meet the basic needs of their societies in the face of the challenges of an epidemic.

Further, the services sectors in Asia evdently do not operate in the same cost environment as in the West. Obligations with respect to rent and interest and profit are more elastic, and demand by the population is less so. Small Asian firms are generally not at the mercy of commercial landlords; in China and Vietnam, hardly at all. Their banks work to keep them afloat, even during periods with little or no profit; this is deemed necessary for social stability. Moreover, what they provide is not thought of as "inessential." Asian families live in very small spaces and need to go outside; they have smaller kitchens and they cannot substitute as readily as in the West against the restaurant trade. Their debt burden is relatively light, savings are relatively ample, and the drive to save to meet fixed costs is mitigated by the public provision of health care and basic education, and by strong family structures that provide a backstop for retirement and emergencies. These factors help account for economic resilience in the face of the disruption that has knocked the leading Western economies to the ground. And that resilience made it possible for governments in Asia to move quickly, with great social solidarity, to get the virus under control so that things could, quite quickly, return to "normal."

## Conclusion

The study of noonomy falls under the purview of institutional economics, which considers issues of economic structure to be fundamental. So does a closely-related body of thinking, biophysical economics, whose principles are drawn from the laws of thermodynamics and set out in three papers by Chen and Galbraith (Chen and Galbraith, 2011, 2012a, 2012b). Biophysical economics stresses that the more advanced and efficient any system – biological, mechanical, or social – the higher the fixed costs and therefore the narrower the margin of safety. The implications of this principle for the effect of stresses, whether emanating from diminished resource-availability, the constraints imposed by climate change or the Covid-19 pandemic are straightforward.

A peculiar conclusion emerges, behind which a general principle may be found. It is precisely those countries which are at the top of the hierarchy of globalization that are at greatest risk of collapse. And precisely those *not* at the top of the global hierarchy of trading relations, and that have *not* made the transition to the most advanced systems of financial relations and household access to credit, that have proved most successful in dealing with the coronavirus, both in their capacities to defeat the pandemic and their ability to retain the full function of their economies and the stability of their social order. It is clear now in the case of the United States that this has not been achieved.

A short paper cannot cover the full spectrum of economic structures that have been obliged to react to the Covid-19 pandemic. I have made no attempt to describe the variations present on the continent of Europe, nor in Russia, nor the situation in the poorer regions of the world, such as Latin America and Africa. But the contrast between the polar cases of the US and UK on one side and the PRC, DRV, ROK and Taiwan on the other is sufficient to illustrate the roles that structure and finance play in determining the economic consequences of the coronavirus.

Some implications may be summarized briefly as they flow from the the structural analyses given above and the goal of a true noonomy. First, as the private provision of global investment goods geared to the needs of the pre-pandemic economy has collapsed, the entire capital-goods-producing sector in the advanced world will need to be redesigned to meet the imperative public purposes ahead, most notably with respect to climate change but also in creating and maintaining a sustainable pattern of agreeable life for our populations, consistent with the requirements of public health, social stability and civilized values. Second, the provision of employment and incomes must be restructured along models that are viable and sustainable in a world of reduced consumer demands for simulacra. Very likely, the new model will have to emphasize cooperative structures of control and the prioritization of individual artistic and craftwork achievement, along with a public job guarantee, initially on a very large scale. Third, the prior structure of debts has been rendered non-viable, so that a restructuring of obligations, of the financial sector and of the distribution of wealth is inevitable.

The framework of noonomy tells us that in moving forward, those who design and plan an economic system must balance the new technologies with the requirements of stability, solidarity, fairness and public purpose. The failure to do so may appear profitable and even prosperous for a time. It may meet the ideological test of conformity to the model of the free market. It may be a paragon of cost reduction and profit maximization, of relentless search for a competitive edge. But market efficiency and market fragility are duals. One purchases them in a package, and the bill comes due in the course of time. Covid-19 has come to us, it appears, in the form of a collection agent.

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