



A Lonergan Institute Seminar St Anselm's Abbey

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CAPITAL IN THE TWENTY-FIRST CENTURY

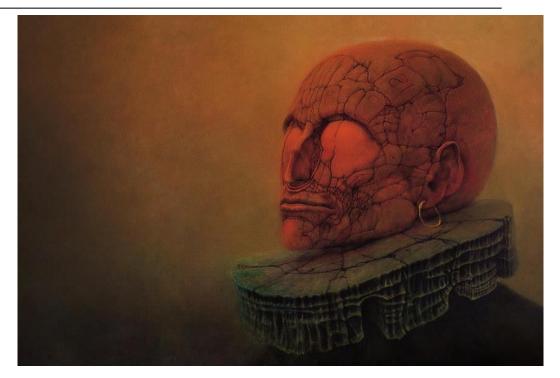
DISCUSSION: SATURDAY, 01/23/2021

"To understand what is at issue here and its relation to the convergence process and the dynamics of inequality, it is important to decompose the growth of output into two terms: population growth and per capita output growth."

"It may be helpful to pause a moment to consider what might be called "the law of cumulative growth," which holds that a low annual growth rate over a very long period of time gives rise to considerable progress."

"Concretely, the population of the world grew at an average annual rate of barely 0.8 percent between 1700 and 2012. Over three centuries, however, this meant that the global population increased more than tenfold. A planet with about 600 million inhabitants in 1700 had more than 7 billion in 2012.

"If this pace were to continue for the next three centuries, the world's population would exceed 70 billion in 2300."



Zdzislaw Beksinski, Untitled, The Historical Museum, Sanok, Poland.

What does a future with 70 billion people look like? Is it possible? What must change to get us there? Utopia or Dystopia?

"The central thesis of this book is precisely that an apparently small gap between the return on capital and the rate of growth can in the long run have powerful and destabilizing effects on the structure and dynamics of social inequality. In a sense, everything follows from the laws of cumulative growth and cumulative returns, and that is why the reader will find it useful at this point to become familiar with these notions."

"According to a UN forecast, the demographic growth rate should fall to 0.4 percent by the 2030s and settle around 0.1 percent in the 2070s. If this forecast is correct, the world will return to the very low-growth regime of the years before 1700. The global demographic growth rate would then have followed a gigantic bell curve in the period 1700–2100, with a spectacular peak of close to 2 percent in the period 1950–1990."

TABLE 2.1.

World growth since the Industrial Revolution (average annual growth rate)

Years	World output (%)	World population (%)	Per capita output (%)	
0-1700	0.1	0.1		
1700-2012	1.6	0.8	0.8	
1700-1820	0.5	0.4	O.I	
1820-1913	1.5	0.6	0.9	
1913-2012	3.0	1.4	1.6	

Note: Between 1913 and 2012, the growth rate of world GDP was 3.0 percent per year on average. This growth rate can be broken down between 1.4 percent for world population and 1.6 percent for per capita GDP.

Sources: See piketty.pse.ens.fr/capital21c.

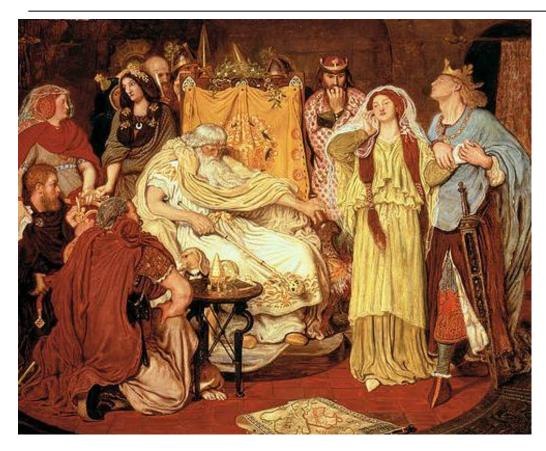
Negative Demographic Growth?

"In 1780, when the population of Western Europe was already greater than 100 million and that of North America barely 3 million, no one could have guessed the magnitude of the change that lay ahead. By 2010, the population of Western Europe was just above 410 million, while the North American population had increased to 350 million. According to UN projections, the catch-up process will be complete by 2050, at which time the Western European population will have grown to around 430 million, compared with 450 million for North America."

"On a grander scale, everyone knows the consequences of the Chinese policy to allow only one child per family (a decision made in the 1970s, when China feared being condemned to remain an underdeveloped country, and now in the process of being relaxed). The Chinese population, which was roughly 50 percent greater than India's when this radical policy was adopted, is now close to being surpassed by that of its neighbor. According to the United Nations, India will be the most populous country in the world by 2020."



Female infanticide in China.



Cordelia's portion by Ford Madox Brown (1821-1893), 1866.

Growth as a Factor for Equalization

"Beyond the consequences for the development and relative power of nations, demographic growth also has important implications for the structure of inequality. Other things being equal, strong demographic growth tends to play an equalizing role because it decreases the importance of inherited wealth: every generation must in some sense construct itself.

To take an extreme example, in a world in which each couple has ten children, it is clearly better as a general rule not to count too much on inherited wealth, because the family wealth will be divided by ten with each new generation. In such a society, the overall influence of inherited wealth would be strongly diminished, and most people would be more realistic to rely on their own labor and savings."

Growth as a Factor for Equalization

"The same would be true in a society where the population is constantly replenished by immigration from other countries, as was the case in America. Assuming that most immigrants arrive without much wealth, the amount of wealth passed down from previous generations is inherently fairly limited in comparison with new wealth accumulated through savings. Demographic growth via immigration has other consequences, however, especially in regard to inequality between immigrants and natives as well as within each group."



Migrant Mother. Great Depression. 1936 Painting. Dorthea Lange.

"Capital-dominated societies in the past, with hierarchies largely determined by inherited wealth (a category that includes both traditional rural societies and the countries of nineteenth-century Europe) can arise and subsist only in low-growth regimes. I will consider the extent to which the probable return to a low-growth regime, if it occurs, will affect the dynamics of capital accumulation and the structure of inequality. In particular, inherited wealth will make a comeback—a long-term phenomenon whose effects are already being felt in Europe and that could extend to other parts of the world as well."

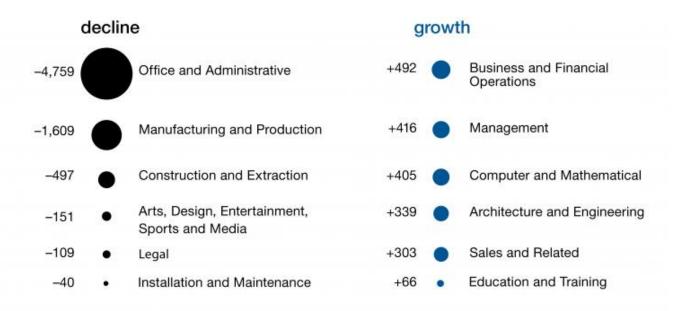


George Bellows, Cliff Dweller

"When growth is zero or very low, the various economic and social functions as well as types of professional activity, are reproduced virtually without change from generation to generation. By contrast, constant growth, even if it is only 0.5 or 1 or 1.5 percent per year, means that new functions are constantly being created and new skills are needed in every generation."



Employment outlook across job families jobs change in thousands, 2015-2020

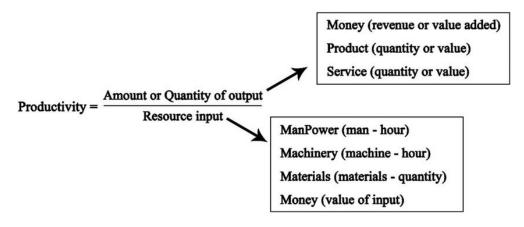


Across major economies - see report for full list.

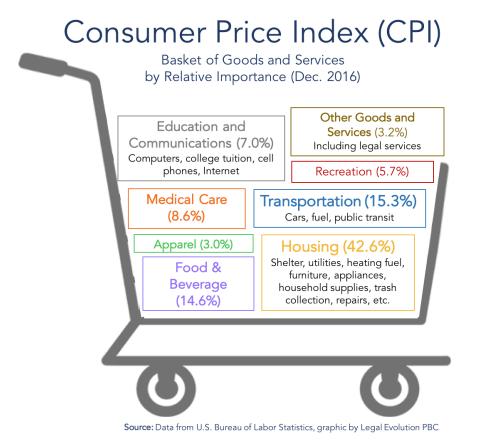
Source: Future of Jobs Report, World Economic Forum

"Take the wealthy countries as an example. In Western Europe, North America, and Japan, average per capita income increased from barely 100 euros per month in 1700 to more than 2,500 euros per month in 2012, a more than twentyfold increase. The increase in productivity, or output per hour worked, was even greater, because each person's average working time decreased dramatically: as the developed countries grew wealthier, they decided to work less in order to allow for more free time (the workday grew shorter, vacations grew longer, and so on)."

"Basically, the eighteenth century suffered from the same economic stagnation as previous centuries. The nineteenth century witnessed the first sustained growth in per capita output, although large segments of the population derived little benefit from this, at least until the last three decades of the century. It was not until the twentieth century that economic growth became a tangible, unmistakable reality for everyone. Around the turn of the twentieth century, average per capita income in Europe stood at just under 400 euros per month, compared with 2,500 euros in 2010."



"But what does it mean for purchasing power to be multiplied by a factor of twenty, ten, or even six? It clearly does not mean that Europeans in 2012 produced and consumed six times more goods and services than they produced and consumed in 1913. For example, average food consumption obviously did not increase sixfold. Basic dietary needs would long since have been satisfied if consumption had increased that much. Not only in Europe but everywhere, improvements in purchasing power and standard of living over the long run depend primarily on a transformation of the structure of consumption: a consumer basket initially filled mainly with foodstuffs gradually gave way to a much more diversified basket of goods, rich in manufactured products and services."



"It is standard to distinguish the following three types of goods and services. For industrial goods, productivity growth has been more rapid than for the economy, so that prices in this sector have fallen relative to the average of all prices. Foodstuffs is a sector in which productivity has increased continuously and crucially over the very long run (thereby allowing a greatly increased population to be fed by ever fewer hands, liberating a growing portion of the workforce for other tasks), even though the increase in productivity has been less rapid in the agricultural sector than in the industrial sector, so that food prices have evolved at roughly the same rate as the average of all prices. Finally, productivity growth in the service sector has generally been low (or even zero in some cases, which explains why this sector has tended to employ a steadily increasing share of the workforce), so that the price of services has increased more rapidly than the average of all prices."

TABLE 2.4.

Employment by sector in France and the United States, 1800–2012
(% of total employment)

Year	France			United States		
	Agriculture	Manufacturing	Services	Agriculture	Manufacturing	Services
1800	64	22	14	68	18	13
1900	43	29	28	41	2.8	31
1950	32	33	35	15	34	50
2012	3	2.1	76	2	18	80

Note: In 2012, agriculture made up 3% of total employment in France v. 21% in manufacturing and 76% in services.

Construction—7% of employment in France and the United States in 2012—was included in manufacturing.

Sources: See piketty.pse.ens.fr/capital21c.

"Now to consider the future. Will the spectacular increase in per capita output I have just described inexorably slow in the twenty-first century? Are we headed toward the end of growth for technological or ecological reasons, or perhaps both at once?"

"The key point is that there is no historical example of a country at the world technological frontier whose growth in per capita output exceeded 1.5 percent over a lengthy period of time. If we look at the last few decades, we find even lower growth rates in the wealthiest countries: between 1990 and 2012, per capita output grew at a rate of 1.6 percent in Western Europe, 1.4 percent in North America, and 0.7 percent in Japan. 21 It is important to bear this reality in mind as I proceed, because many people think that growth ought to be at least 3 or 4 percent per year. As noted, both history and logic show this to be illusory."

TABLE 2.5.

Per capita output growth since the Industrial Revolution
(average annual growth rate)

	Per capita world output (%)	Europe (%)	America (%)	Africa (%)	Asia (%)
Years					
0-1700	0.0	0.0	0.0	0.0	0.0
1700-2012	0.8	1.0	1.1	0.5	0.7
1700-1820	0.1	0.1	0.4	0.0	0.0
1820-1913	0.9	1.0	1.5	0.4	0.2
1913-2012	1.6	1.9	1.5	1.1	2.0
1913-1950	0.9	0.9	1.4	0.9	0.2
1950-1970	2.8	3.8	1.9	2.1	3.5
1970-1990	1.3	1.9	1.6	0.3	2.I
1990-2012	2.1	1.9	1.5	1.4	3.8
1950-1980	2.5	3.4	2.0	1.8	3.2
1980-2012	1.7	1.8	1.3	0.8	3.1

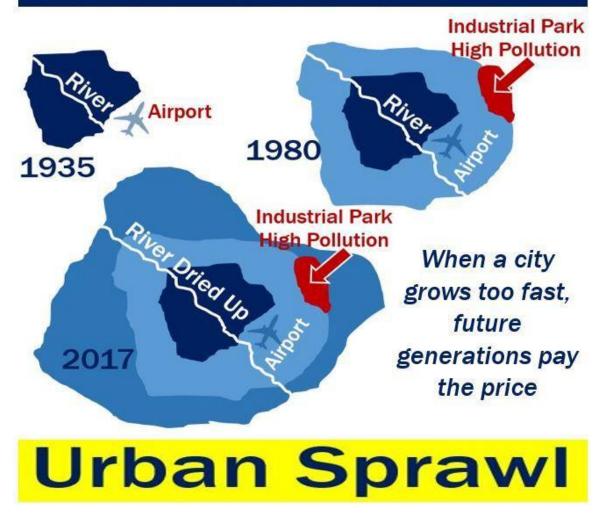
Note: Between 1910 and 2012, the growth rate of per capita output was 1.7% per year on average at the world level, including 1.9% in Europe, 1.6% in America, etc.

Sources: See piketty.pse.ens.fr/capital21c.

"The median scenario I will present here is based on a long-term per capita output growth rate of 1.2 percent in the wealthy countries, which is relatively optimistic compared with Robert Gordon's predictions (which I think are a little too dark). This level of growth cannot be achieved, however, unless new sources of energy are developed to replace hydrocarbons, which are rapidly being depleted. This is only one scenario among many."

"The right way to look at the problem is once again in generational terms. Over a period of thirty years, a growth rate of 1 percent per year corresponds to cumulative growth of more than 35 percent. A growth rate of 1.5 percent per year corresponds to cumulative growth of more than 50 percent. In practice, this implies major changes in lifestyle and employment."

Sustainable Growth?

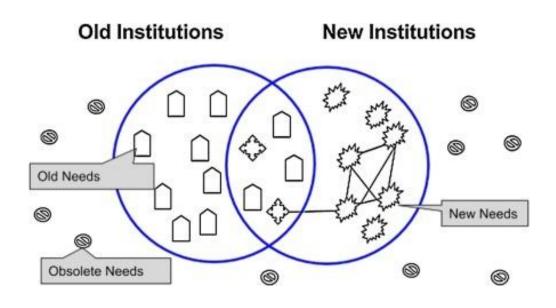


"What this means is that today's societies are very different from the societies of the past, when growth was close to zero, or barely 0.1 percent per year, as in the eighteenth century. A society in which growth is 0.1–0.2 percent per year reproduces itself with little or no change from one generation to the next: the occupational structure is the same, as is the property structure. A society that grows at 1 percent per year, as the most advanced societies have done since the turn of the nineteenth century, is a society that undergoes deep and permanent change. This has important consequences for the structure of social inequalities and the dynamics of the wealth distribution."

"Growth can create new forms of inequality: for example, fortunes can be amassed very quickly in new sectors of economic activity."

"At the same time, however, growth makes inequalities of wealth inherited from the past less apparent, so that inherited wealth becomes less decisive."

"Economic growth is quite simply incapable of satisfying this democratic and meritocratic hope, which must create specific institutions for the purpose and not rely solely on market forces or technological progress."



Discussion:

What would a new institution designed to manage inequities of wealth look like today?

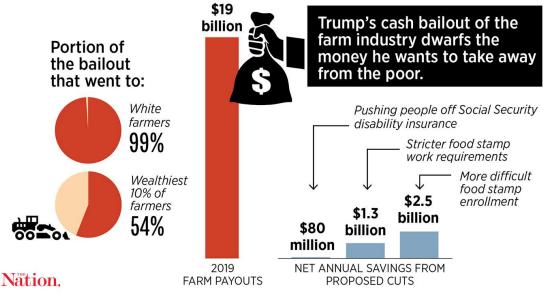


"These very different collective experiences of growth in the twentieth century largely explain why public opinion in different countries varies so widely in regard to commercial and financial globalization and indeed to capitalism in general. In continental Europe and especially France, people quite naturally continue to look on the first three postwar decades—a period of strong state intervention in the economy—as a period blessed with rapid growth, and many regard the liberalization of the economy that began around 1980 as the cause of a slowdown."

"In Great Britain and the United States, postwar history is interpreted quite differently. Between 1950 and 1980, the gap between the English-speaking countries and the countries that had lost the war closed rapidly. By the late 1970s, US magazine covers often denounced the decline of the United States and the success of German and Japanese industry. In Britain, GDP per capita fell below the level of Germany, France, Japan, and even Italy. It may even be the case that this sense of being rivaled (or even overtaken in the case of Britain) played an important part in the "conservative revolution."

"Margaret Thatcher in Britain and Ronald Reagan in the United States promised to "roll back the welfare state" that had allegedly sapped the animal spirits of Anglo-Saxon entrepreneurs and thus to return to pure nineteenth-century capitalism, which would allow the United States and Britain to regain the upper-hand. Even today, many people in both countries believe that the conservative revolution was remarkably successful, because their growth rates once again matched continental European and Japanese levels."

Who Deserves Government Help?



Sources: NPR: The Counter: The Wall Street Journal: HuffPost; The Washington Post; 2020 infographic; Tracy Matsue Loeffelholz

"In fact, neither the economic liberalization that began around 1980 nor the state interventionism that began in 1945 deserves such praise or blame. France, Germany, and Japan would very likely have caught up with Britain and the United States following their collapse of 1914–1945 regardless of what policies they had adopted (I say this with only slight exaggeration). The most one can say is that state intervention did no harm. Similarly, once these countries had attained the global technological frontier, it is hardly surprising that they ceased to grow more rapidly than Britain and the United States or that growth rates in all of these wealthy countries more or less equalized, as Figure 2.3 shows."

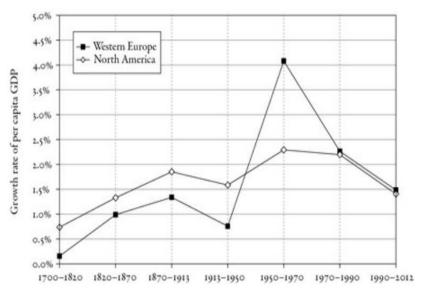


FIGURE 2.3. The growth rate of per capita output since the Industrial Revolution

The growth rate of per capita output surpassed 4 percent per year in Europe between 1950 and 1970, before returning to American levels.

Sources and series: see piketty.pse.ens.fr/capital21c.

The Question of Inflation

"Relative price movements can play an even more decisive role in Ricardo's theory based on the principle of scarcity: if certain prices, such as those for land, buildings, or gasoline, rise to very high levels for a prolonged period of time, this can permanently alter the distribution of wealth in favor of those who happen to be the initial owners of those scarce resources."

How Does Inflation Work?

Inflation represents the rate at which the cost of goods and services increase over a period of time.

Demand-Pull



When demand for goods/service exceeds production capacity.

Cost-Push



When production costs increase prices.

Built-In



When prices rise, wages rise too, in order to maintain living costs.



"In addition to the question of relative prices, I will show that inflation per se—that is, a generalized increase of all prices—can also play a fundamental role in the dynamics of the wealth distribution. Indeed, it was essentially inflation that allowed the wealthy countries to get rid of the public debt they owed at the end of World War II. Inflation also led to various redistributions among social groups over the course of the twentieth century, often in a chaotic, uncontrolled manner. Conversely, the wealth-based society that flourished in the eighteenth and nineteenth centuries was inextricably linked to the very stable monetary conditions that persisted over this very long period."

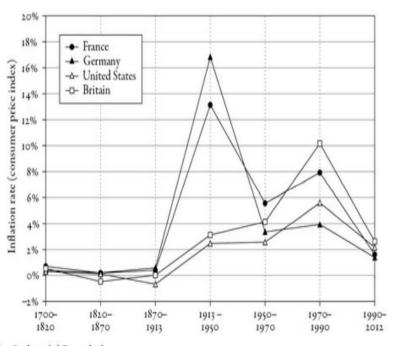


FIGURE 2.6. Inflation since the Industrial Revolution

Inflation in the rich countries was zero in the eighteenth and nineteenth centuries, high in the twentieth century, and roughly 2 percent a year since 1990.

Sources and series: see piketty.pse.ens.fr/capital21c.

"In eighteenth-and nineteenth-century novels, money was everywhere, not only as an abstract force but above all as a palpable, concrete magnitude. Writers frequently described the income and wealth of their characters in francs or pounds, not to overwhelm us with numbers but because these quantities established a character's social status in the mind of the reader. Everyone knew what standard of living these numbers represented. These monetary markers were stable, moreover, because growth was relatively slow, so that the amounts in question changed only very gradually, over many decades."

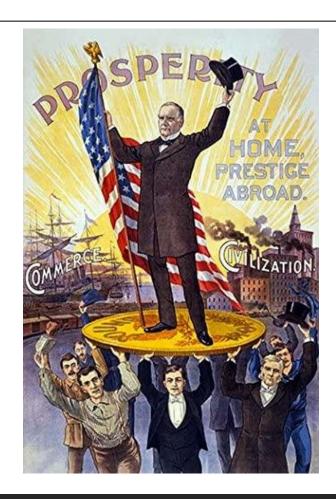
A large income is the best recipe for happiness I ever heard of. -- Jane Austen

Finance, like time, devours its own children. -- Honore de Balzac

It is a truth universally acknowledged, that a single man in **possession of a good fortune**, must be in want of a wife. – Jane Austen

The Loss of Monetary Bearings in the Twentieth Century

"This world collapsed for good with World War I. To pay for this war of extraordinary violence and intensity, to pay for soldiers and for the ever more costly and sophisticated weapons they used, governments went deeply into debt. As early as August 1914, the principal belligerents ended the convertibility of their currency into gold. After the war, all countries resorted to one degree or another to the printing press to deal with their enormous public debts. Attempts to reintroduce the gold standard in the 1920s did not survive the crisis of the 1930s: Britain abandoned the gold standard in 1931, the United States in 1933, France in 1936."



The Loss of Monetary Bearings in the Twentieth Century

"Between 1913 and 1950, inflation in France exceeded 13 percent per year (so that prices rose by a factor of 100), and inflation in Germany was 17 percent per year (so that prices rose by a factor of more than 300). In Britain and the United States, which suffered less damage and less political destabilization from the two wars, the rate of inflation was significantly lower: barely 3 percent per year in the period 1913–1950. Yet this still means that prices were multiplied by three, following two centuries in which prices had barely moved at all."

"In all countries the shocks of the period 1914–1945 disrupted the monetary certitudes of the prewar world, not least because the inflationary process unleashed by war has never really ended."

Effect of Inflation on Distribution of Income & Wealth

- People who invest in shares or bonds will gain more due to higher profits earned by firms
- On the other hand, people investing in assets reaping fixed income
 (Fixed Deposit etc) will be in loss
- Farmers benefits from inflation as they would earn more on the products produced. It will also increase the cost of production but rise in price is more than rise in cost.
- However, the advantage is gained by rich farmers than poor farmers
- Thus, inflation redistributes income in favour of businessmen, debtors & farmers at the expense of fixed income group, creditors

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