

The Generational Cycles of Simon Kuznets in Bulgaria

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Генерационните цикли на Симон Кузнец в България

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Авторите нямат конфликт на интереси.

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Abstract

It is considered to what extent the probability of extermination of the new working-active generation, expressed in the authors' research in 2015, was realized in the period of the descending phase of the generation cycle of Simon Kuznets in the period 2008-2020. For this purpose, three indicators are studied – demographic, social, and economical. The thesis is that the extermination will most likely occur in 2035-2043 when risk factors are superimposed both from the descending phase of the next generation cycle of Simon Kuznets and from the ascending phase of the US military budget.

Keywords: Simon Kuznets' generation cycle, extermination of the new working-active generation, demographic, social, and economic indicators, the US military budget

Резюме

Разглежда се доколко вероятността за изстребление на новото трудово-активно поколение, изказана в изследванията на авторите през 2015 год., се е реализирала в периода на низходяща фаза на поколенческия цикъл на Саймън Кузнец в периода 2008-2020 год. За целта се изследват три групи показатели – демографски, социални и икономически. Изказва се теза, че изстреблението най-вероятно ще се реализира в периода 2035-2043 год., когато се наслагват рискови фактори както от низходящата фаза на следващия поколенческия цикъл на Саймън Кузнец, така и от възходящата фаза на американския военен бюджет.

Ключови думи: поколенчески цикъл на Саймън Кузнец, изстребление на новото трудово-активно поколение, демографски, социални и икономически показатели, американския военен бюджет

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The Generational Cycles of Simon Kuznets in Bulgaria

The study aims to test a thesis made several years ago based on our research on the cyclical nature of the generational cycles of Simon Kuznets in Bulgaria. (Naidenov, Haralampiev, 2015; Naidenov, Haralampiev, 2019)

In the thesis, we predict that the extermination of the new working-active generation in Bulgaria is imminent. This is because we are entering the descending phase of Simon Kuznets' current generational cycle. Namely, in the descending phase, the sizeable Bulgarian capital exterminates every new working-active generation. At the same time, we clarify that circumstances allow the large Bulgarian capital to exterminate the current working-active generation during the descending phase of the next generational cycle of Simon Kuznets.

Background

Ten years ago, G. Naidenov sporadically dealt with why the Bulgarian ruling class exterminates every new working-active generation.¹ In the beginning, the causes are studied in general terms. Since extermination is often carried out by inciting wars, Naidenov points out that “Even in the event of defeat in a war, large capital is not a loser, because 1. The destruction of production's material and technical base favors technological renewal; 2. The labor cost is very low and favors the concentration of capital; 3. The ruin of small and medium-sized businesses favors the centralization of capital. That this is so is evidenced by the successful development of Germany and Japan after World War II“. (Naidenov, Veleva, 2011, p. 202)

In 2015, our study "Local and global risk factors for the development of Bulgaria and the world in the second decade of the XXI century" was published in the Yearbook of UNWE, in which the reasons for the extermination of each working-active generation are discussed in more details. It is emphasized that:

The periodic extermination of each new working-active generation is the basic instinct of any sizeable national capital. What are the reasons for the presence of this instinct?

Compared to other "actors" in the production process, the large national capital is most responsible for the expanded reproduction of the means of production. The productive social force of labor is embodied in the means of production. To provide the most favorable conditions for the development of social productive force of labor, large capital seeks to increase its profits

¹ The generation of our grandfathers was exterminated during the First and Second Balkan Wars and World War I. The generation of our fathers was exterminated during World War II. Our generation was exterminated in the 1990s through a series of three price shocks – the winter of 1990/91, 1994, and the winter of 1996/97.

because only by capitalizing part of the profits it successfully realizes its role in the social division of labor – expanded reproduction of means of production.

Profits can be increased by introducing new technologies and better organization of production, i.e., by "new combinations of factors of production" if we use Schumpeter's expression. But profits can also be increased by changing the proportions in the distribution of newly created value between hired labor and capital. Profits can be increased by increasing the share of added value at the expense of the required value.

The most effective way to change the proportions in the division of newly created value between labor and capital is by subjecting one's own nation to destabilization, poverty, and destruction. This is usually done through wars. Significant national capital always wins in wars, whether the country is a winner or a loser. If the war is won, it expands the territory and the population to be exploited. But even if the war is lost, large national capital still wins first because destroying production's material and technical base favors technological renewal.² Second, because the value of labor becomes very low, this favors the concentration of capital.³ Third, the ruin of small and medium-sized businesses due to the reduced purchasing power of the population favors the centralization of capital.⁴ Fourth, non-economic forms of exploitation were much more widely used during the war.⁵ Fifth, during the war and the years after, the disabled, pensioners, etc., categories of the population that cost only expenses but do not bring benefits to large capital died out en masse. That is, large capital also gets rid of this "burden" and reduces its production costs. Proof that even the loser of the war, the large national capital, still wins is the successful development of Germany and Japan after World War II. The two countries that lost the war became the most competitive in the international division of labor!

Apart from wars, a very effective way of subjecting the new working-active generation to scarcity and doom is to realize a series of price shocks.

This is precisely how our generation was subjected to ruin in the 1990s (Naidenov, Haralampiev, 2015, p. 50-52).

² It is no coincidence that most wars are fought in the ascending phase of Kondratiev's long waves when the technological basis of production is changed, and new infrastructure is built.

³ Marx notes that, unlike other commodities, the commodity of the labor force contains, in addition to production costs, a moral and historical element. A long-term war "accustoms" the hired labor force to a much lower level of consumption. Both during and after the war, for decades, the hired worker took as "moral" the new, severely damaging proportions in the distribution of newly created value. Example – Bulgaria after the First and Second World Wars.

⁴ During the war, large national capital at a much faster rate "sucked" small and medium-sized businesses.

⁵ They are well-known non-economic methods of exploitation used in Nazi Germany during World War II.

The study has a special section entitled - "1.1. The tradition of the Bulgarian ruling class to subject the nation to destabilization as a means of "accelerating" the concentration and centralization of capital." (Naidenov, Haralampiev, 2015, p. 50)

This study published our research on the generational (construction) cycles of Simon Kuznets in the dynamics of the Bulgarian economy.⁶ We are looking for the connection between the generational cycles with the periodic extermination of the Bulgarian nation. (Naidenov, Haralampiev, 2015, p. 57-61) We enounce two hypotheses:

The first is that there is such a connection. Whether this is the case can be established if the three exterminations are "located" on the dynamics of generational cycles in the same way.

Our second hypothesis is that generational cycles are in a downward phase during the three exterminations of the nation. The reason for this hypothesis is that in a period of poverty and death, the new working generation applies strategies for survival, not for improving their living standards by acquiring their own home. (Naidenov, Haralampiev, 2015, p. 58)

How did we test both hypotheses?

First, through Bayesian periodogram analysis, we established the existence of generational cycles in the Bulgarian construction industry. Then we applied the Bayesian periodogram analysis to the life expectancy and population as 31.12., of the respective year. We received two groups of cycles – the first with a period of 20-22 years and the second – with a period of 26-28 years. We built two graphs with the dynamics of the indicators of the two groups of cycles. On them, we "dropped" in orange the periods of the three exterminations – 1912-1918, 1941-1945, and 1991-1997. On both sides of each band, we dropped yellow bands for five years. In our opinion, each extermination has a longer duration than the period of direct extermination. However conditional it may be, direct extermination must be "surrounded" by two periods of at least five years. G. Naidenov, born in 1950, testified that there was still a famine during his childhood. So five years is the "minimum" term. See Fig. 1 and Fig. 2 (Naidenov, Haralampiev, 2015, p. 57-60).

⁶ Simon Kuznets established the presence of waves lasting 20-25 years, first in the construction industry. He also calls them generational cycles because, firstly – they are with the duration of the change of generations, secondly – he believes that the reason for the existence of these cycles is the desire of each new generation to build a home.

Figure 1

Cycles in the construction production index, in the index of employed in construction, and life expectancy

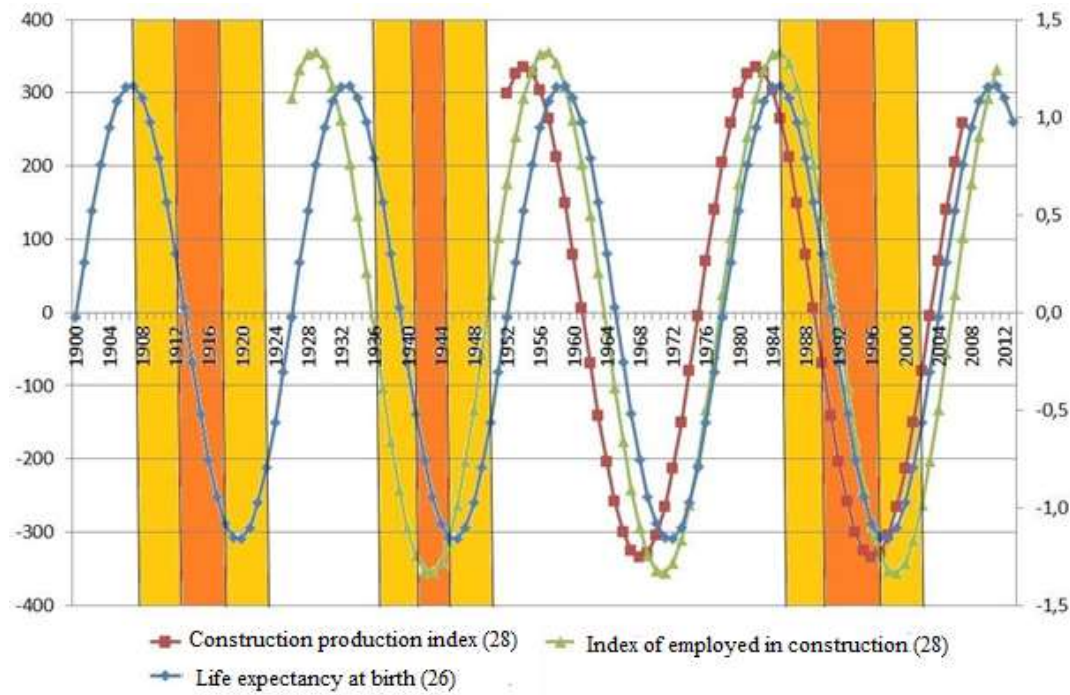
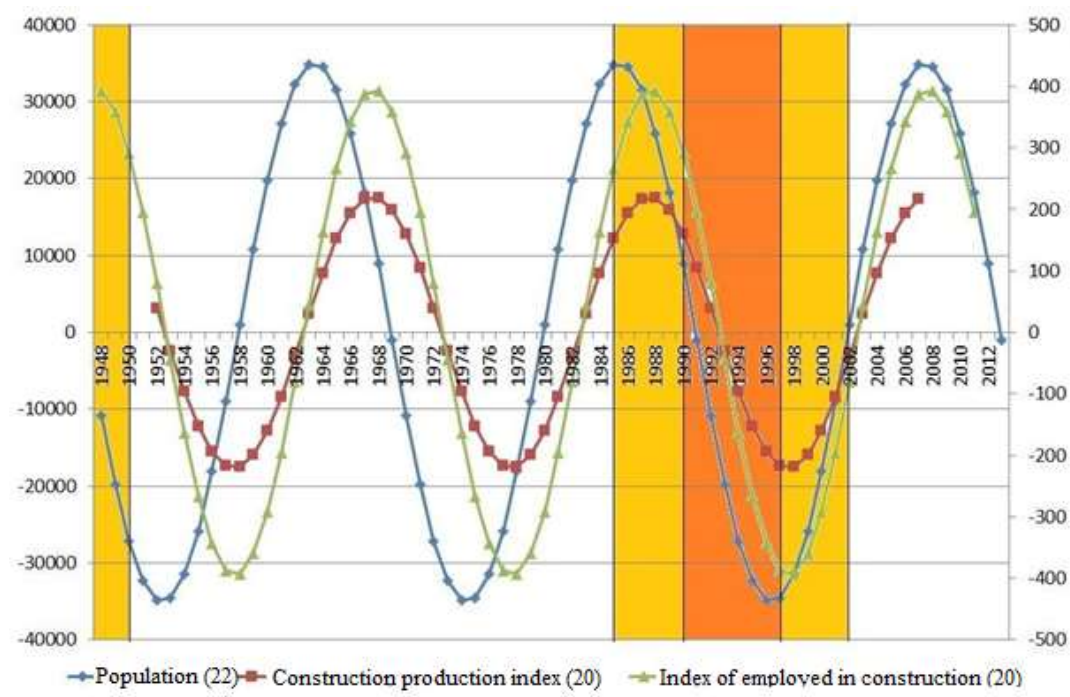


Figure 2

Cycles in the construction production index, in the index of employed in construction, and in the population as of 31.12. every year



The results of the study showed that:

"a) Generational cycles are in a downward phase during the country's three devastations. This is a confirmation of both the first and the second hypotheses;

b) In the first half of the twentieth century, two devastations "happened," while in the second half of the twentieth century, only one. In our opinion, the reason for the "looseness" of destruction in the second half of the twentieth century, compared to those in the first half, is that in the second half, there is only one reason for destabilization – the transition from Soviet to corporate state capitalism, which is a social transformation of second order. While in the first half of the twentieth century, there was a first-order social transformation. Because although a secondary bourgeois revolution took place on September 9, 1944, it solved unsolved problems inherited from the first bourgeois revolution – the Russo-Turkish Liberation War. We mean that after the Russo-Turkish War, the peasants were landed, not dispossessed. So, the main task of the genesis of capitalism – breaking the link of the immediate producer with his means of production and expropriating private property of the masses is carried out only after 9.09.1944. In practice, the genesis of capitalism in Bulgaria is carried out through two consecutive destructions.

c) The peak of the last generational cycle was during the great economic crisis that began in 2008. The question is – during the downward phase, which is currently "running," will there be devastation, or will it take place in the low phase of the next generational cycle?" (Naidenov, Haralampiev, 2015, p. 60).

We answer that the probability of extermination during the descending phase, which then "runs," is "very high" (Naodenov, Haralampiev, 2015, p. 60). We substantiate this hypothesis because "there is already a new working-active generation on the labor market, which is subject to extinction. Several indicators indicate that preparations for this have already been made and that it has already begun. For example, the hysteria and frustration of public opinion through the activities of nationalist parties and the accumulation of interethnic hatred, reactivation of the opposition between "communists" and "anti-communists", the creation of political instability in the summer of 2013, draining and bankrupting Corporative Commercial Bank, etc" (Naidenov, Haralampiev, 2015, p. 60-61).

At the same time, from a purely economic point of view, extermination is currently not essential for large distribution coalitions – Multigroup, SIK, TIM, "The Cats," Ivo Prokopiev, Tsvetelina Borislavova, Alexei Petrov, etc. It is not essential, as the major distribution coalitions

already have a consensus to include another mechanism for concentration and centralization of capital in the orbit of distribution – increasing public debt. If they distribute among themselves two billion state debts a year, as was the case in the first term of Borissov's government, the devastation could be postponed until the downward phase of the next generational cycle. Because the dangerous values of the state debt will be reached within it.” (Naidenov, Haralampiev, 2015, p. 61)⁷

The descending phase of the then-generational cycle is now over. We can now verify whether the thesis that extermination can take place during the downward phase, which then "runs," is true or that the ruling class will postpone extermination until the low phase of the next generation cycle, using the opportunity to increase government debt significantly.

For this purpose, we will study the dynamics of three groups of indicators. The three groups are – demographic indicators, social indicators, and economic indicators.

We will examine the following demographic indicators:

- Crude death rate – 1881-2020 (Sources: for the period 1881-1959 – Mitchell (1992); for the period 1960-2020 – World Bank);
- Infant mortality rate – 1892-1912 and 1918-2020 (Sources: for the period 1892-1912 and 1918-1959 – Mitchell (1992); for the period 1960-2020 – World Bank);
- Crude birth rate – 1897-2020 (Sources: for the period 1879-2015 – gapminder.org; for the period 2016-2020 – World Bank);
- Life expectancy at birth – 1879-2021 (Source: gapminder.org);
- Total population – 1879-2021 (Source: gapminder.org);
- Immigrants – 2007-2020 (Source: National Statistical Institute (NSI));
- Emigrants – 1893-1902, 1931-1941, and 2007-2020 (Sources: for the period 1893-1902 and 1931-1941 – Mitchell (1992); for the period 2007-2020 – NSI);
- Net migration – 2007-2020 (Source: own calculations).

Social indicators are:

- Health status of the population:
 - Mortality by neoplasms – 1962-2020 (Source: NSI);
 - Mortality by diseases of the circulatory system – 1962-2020 (Source: NSI);
 - Mortality by suicides and intentional self-harms - 1962-1975, 1990, 1995, and 2000-2020 (Source: NSI).

⁷ It should be noted that even during the study's publication (2015), the distribution coalitions began to "absorb" twice larger amounts.

- State of education:
 - Educational attainment, at least Bachelor's or equivalent, population 25+ - 1975, 1992, 2001, 2006-2017, and 2020 (Source: World Bank);
 - Drop-outs of school education – 1996-2020 (Source: NSI).
- Income inequality:
 - Gini coefficient – 1879-2021 (Source: gapminder.org).

The economic indicators are:

- GDP per capita, PPP, inflation-adjusted – 1879-2021 (Source: gapminder.org);
- External debt stocks, public and publicly guaranteed, current US\$ - 1981-2019 (Source: gapminder.org);
- External debt stocks, total, current US\$ - 1981-2019 (Source: gapminder.org);
- Loans to non-financial corporations – 2005-2021 (Source: Bulgarian National Bank (BNB));
- Loans to households and NPISHs (non-profit institutions serving households) – 2005-2021 (Source: BNB);
- Foreign direct investment, net inflows, current US\$ - 1980-2020 (Source: World Bank).

Also, we updated the data on the construction production index and the employed index until 2019.

We then re-applied Bayesian period gram analysis with the following exceptions:

- Since the construction cycles of Simon Kuznets have periods of between 20 and 25 years, to establish such cycles with certainty, at least a cycle and a half must be observed in the available time series. This means that the time series length must be greater than the maximum length of Simon Kuznets' construction cycles, multiplied by 1.5, i.e., 25×1.5 , which means that the time series must be longer than 38 years. The time series that are shorter than 38 years are:
 - Immigrants – 14 years;
 - Net migration – 14 years;
 - Loans to non-financial corporations - 17 years;
 - Loans to households and NPISHs - 17 years.
- There is one time series that is longer than 38 years, but there are many missing values, as a result of which the available values are less than 38 years. This time series is:

- Emigrants – 128 years, but there is data for only 35 years;

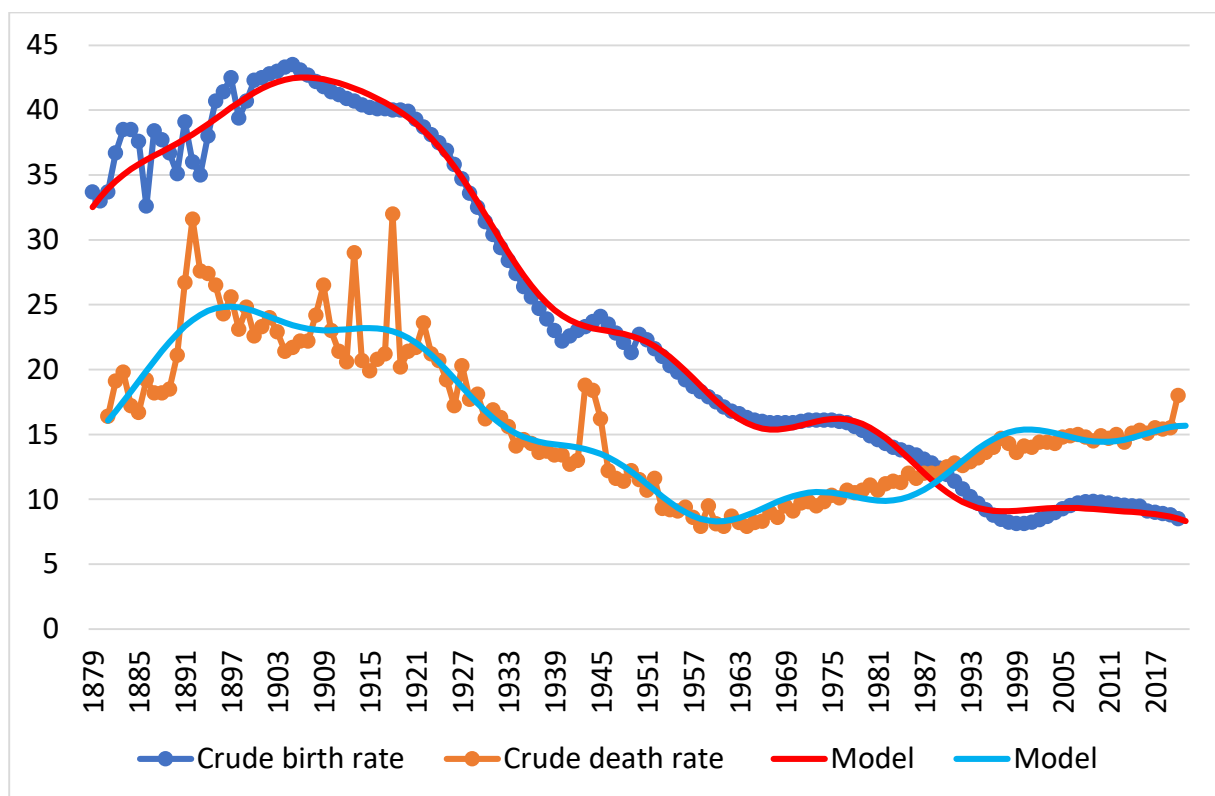
No Bayesian spectral analysis was applied for these five-time series, and they are presented only as raw data.

When we applied the Bayesian periodogram analysis for the time series of the construction production index and the index employed in construction, we obtained a Simon Kuznets cycle with a period of 22 years. The descending phase of this cycle is in the period 2008-2020.

Demographic indicators

Figure 3

Crude birth and death rates (%)



Note: Source: gapminder.org, Mitchell (1992), World Bank and own calculations

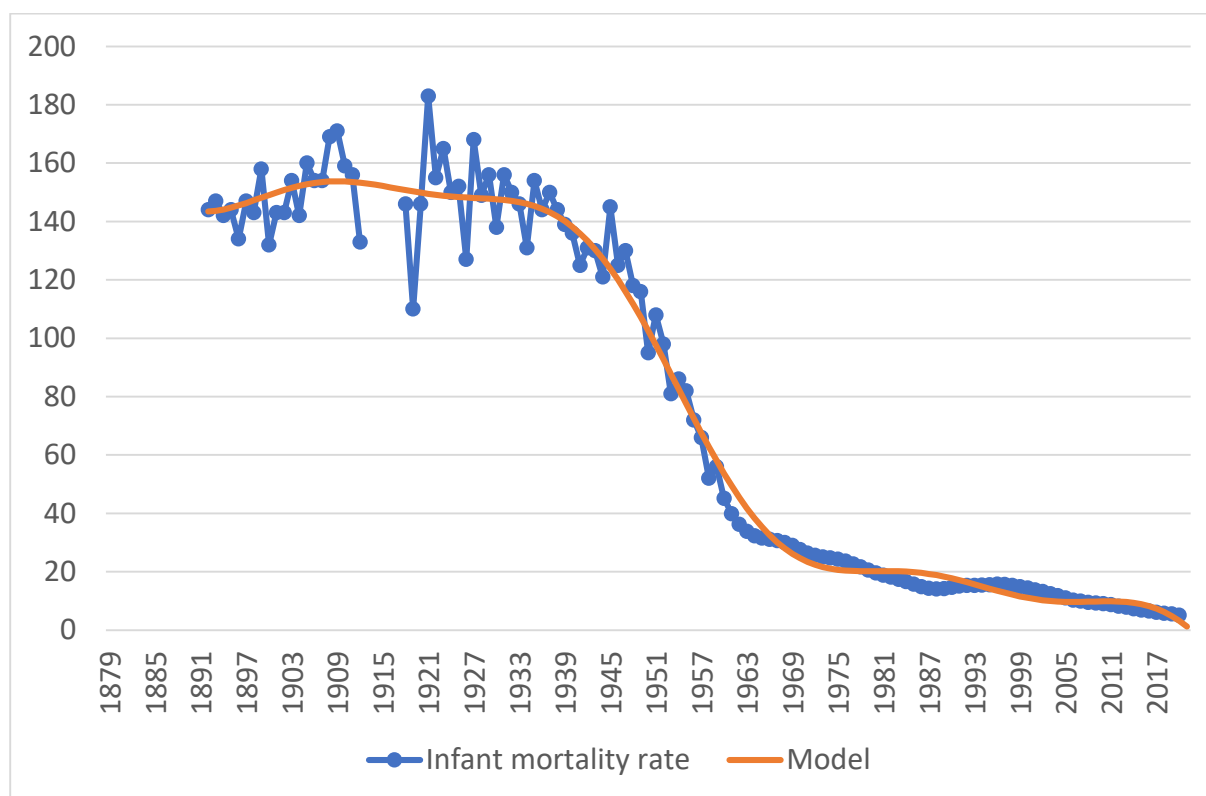
The birth rate increased from the Liberation to the middle of the first decade of the 20th century. Then begins its gradual decline. In three short periods, there is an increase again. But these increases do not change the smooth trend of declining birth rates. The reason for the decrease in the birth rate is the ongoing industrialization and the establishment of the capitalist mode of production. The decrease in the birth rate is not an isolated case only in Bulgaria. Sugareva and Lilova show that "the crude birth rate decreased in all European countries during the period 1960-1990" (Sugareva, Lilova, 2010, p. 62). The theory of demographic transition

gives one possible explanation for this. "The demographic transition is a process leading from a regime with a high level of births and deaths to a regime with a low birth rate and mortality" (Kaloyanov, 2015, p. 7; Sugareva, 2004, p. 32; Presa, 2006, p. 60). In this sense, the decrease in the birth rate in Bulgaria is a result of the demographic transition and follows a model that is more or less typical for all developed countries. In most countries where industrialization and the consolidation of the capitalist mode of production are beginning, a similar decline in the birth rate is observed. At the beginning of industrialization, there was an increase in the birth rate, as it led to an increase in labor productivity and the possibility for a larger number of the local population to earn a living on the territory of a given country. But once a certain level of industrialization is reached, the birth rate begins to decline.

The death rate from the Liberation to the beginning of the 20th century is increasing. Then until the early 60s of the 20th century gradually decreased. Except for the periods in which Bulgaria participated in wars. Then it increases, albeit for short periods. From the early 1960s until now, the death rate has been rising steadily. The most important reason for this is the aging population. This is a demographic reason. But there are undoubtedly both social and economic reasons. Namely, since the mid-1970s, the long wave of economic conjuncture has entered its downward phase. This has led to a slowdown in economic growth. And also to the deterioration of the entrepreneurial activity of the collective capitalist – the nomenclature of the Bulgarian Communist Party. The efficiency of social institutions is also deteriorating – the legal system, healthcare, etc. Inevitably, these processes increase the mortality of the population.

The intersection of the two lines is after 1989. Then began the transition from Soviet state capitalism to corporate state capitalism. Since then, negative population growth has already started. Some authors call the current demographic situation a catastrophe (Stefanov, 2022). Although exaggerated, this definition is close to the truth.

For the period of the descending wave of the generation cycle of Simon Kuznets – from 2008 to 2020, we do not find any differences in the dynamics of births and deaths. This is important because it shows that no extermination of the Bulgarian nation took place during this period.

Figure 4*Infant mortality rate (‰)*

Note: Source: Mitchell (1992), World Bank and own calculations

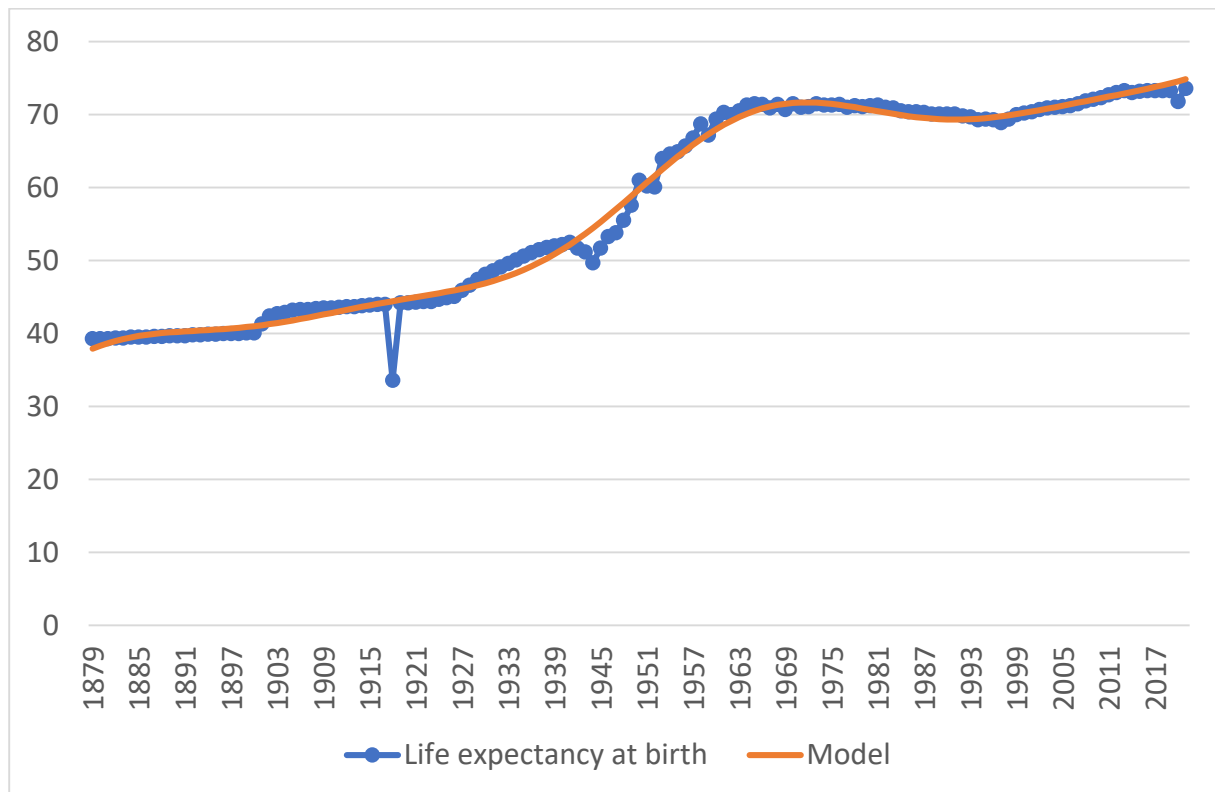
There are four periods in the dynamics of the infant mortality rate. The first is from the 90s of the 19th century to the early 20s of the 20th century. During this period, despite the large amplitudes, the overall infant mortality rate remained at the same level. The second period is from the early 1920s to the mid-1940s. During this period, there is a steady trend of reducing infant mortality. The reason is the establishment of the capitalist mode of production and the related improvement of the health care system. Increased processes of industrialization and urbanization also have a positive impact on reducing infant mortality. The third period is from the mid-1940s to the early 1960s. During this period, there was a sharp decline in infant mortality. The main reason for the sharp decline is the strong impetus given by the September 9 of 1944 Revolution to the establishment of the capitalist mode of production and the related processes of industrialization and urbanization. The transition from communal state capitalism to Soviet state capitalism has significantly improved the health care system and decreased infant mortality rates. The fourth period is from the early 60's – until now. Through it, the reduction of infant mortality continues. But not at a pace similar to the previous period.

During this period, from 1989 to the mid-1990s – 1996, there was an increase in infant mortality. This is because, after November 10, 1989, the transition from Soviet state capitalism to corporate state capitalism began. As we have already noted, the Bulgarian ruling class adopted the strategy of exterminating the Bulgarian nation to carry out this transformation, which it realized through three consecutive price shocks during this period. Naturally, the extermination of the country leads to an increase in infant mortality. However, this period of increasing infant mortality is relatively short. After that, the rate of decline in infant mortality is similar to that of before.

For the period of the descending wave of the generation cycle of Simon Kuznets – from 2008 to 2020, we do not find any differences in the rate of reduction of infant mortality. This shows that no extermination of the Bulgarian nation took place during this period.

Figure 5

Life expectancy at birth (years)



Note: Source: gapminder.org and own calculations

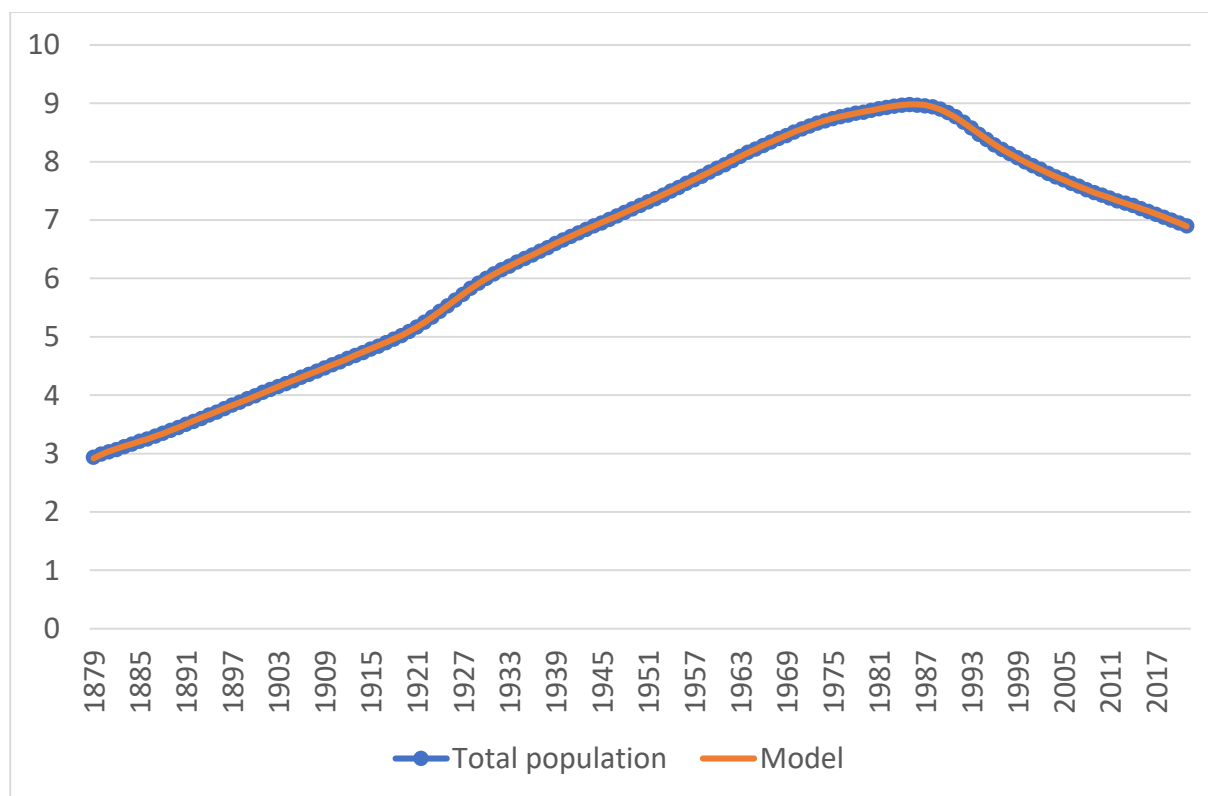
In the dynamics of life expectancy, several periods stand out. From the Liberation to the beginning of the 20th century, it remained on the same level. Then – from the beginning of the century to the early '40s, it rises gradually. There were declines during the two world wars. After 1944, when the transition from corporate to Soviet state capitalism began until the mid-1960s, life expectancy significantly increased. The reason for this is the significant impetus in

establishing the capitalist mode of production, which gives the September 9 revolution and accelerating industrialization and urbanization, decisive improvement of health and education systems, etc. In those years, there was a gradual decline in life expectancy from the mid-'60s to the mid-'90s. The reason for this is that in the mid-1960s, industrialization was over. The ruling class could not find a solution to the looming problems in investment activity, and in the mid-1970s, the downward phase of the long wave of economic conjuncture began. The strategy of extermination of the Bulgarian nation, through three consecutive price shocks of the ruling class, in the conditions of transition from Soviet to corporate state capitalism, also had an impact on the significant decline in life expectancy in the first half and mid-1990s. In the last period – from 1992 – until now, life expectancy is increasing again at a steady pace.

For the period of the descending wave of the generation cycle of Simon Kuznets – from 2008 to 2020, we do not find any differences in the dynamics of life expectancy. This shows that during this period, no extermination of the Bulgarian nation took place.

Figure 6

Total population (millions)



Note: Source: gapminder.org and own calculations

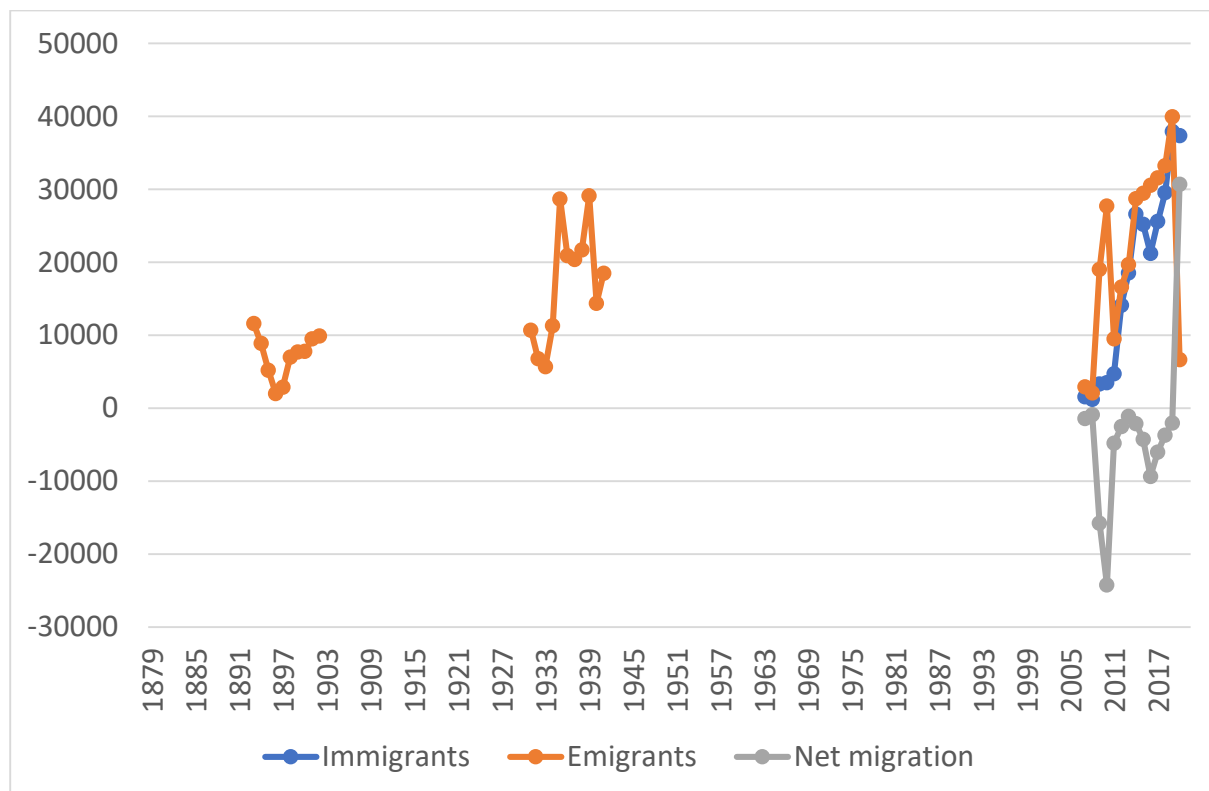
Two periods can be clearly seen in the dynamics of the population. The first one is from the Liberation to the mid-1980s. During this period, there was a gradual increase in population. From 2.94 million in 1879, it reached 8.95 million in 1985. After 1986, the people began to

decline (Kiossev, 2007; 2022). This is due to the negative natural increase that started in 1990 and migration processes.

For the period of the descending wave of the generation cycle of Simon Kuznets – from 2008 to 2020, we do not find any differences in the dynamics of the population. This shows that during this period, no extermination of the Bulgarian nation took place.

Figure 7

Immigrants, emigrants, and net migration (number)



Note: Source: NSI, Mitchell (1992) and own calculations

Emigration from 2007 to 2019 increased significantly – from 2958 to 39,941 people. Except for the period of the economic crisis – 2008-2012, when it decreased sharply. After 2019, there was another sharp decline in emigration. For the same period, immigration has been growing steadily. Except for the period 2014-2016, when it decreases. Net migration fluctuates, sometimes very sharp, until 2019. A very strong increase follows this. In 2019, it was 30,715 people.

We have already pointed out that there is an opinion in the public space that as a result of the negative natural growth of the population and emigration, we, the Bulgarians, are currently in a demographic catastrophe (Stefanov, 2022). This notion is too "strong." But it is

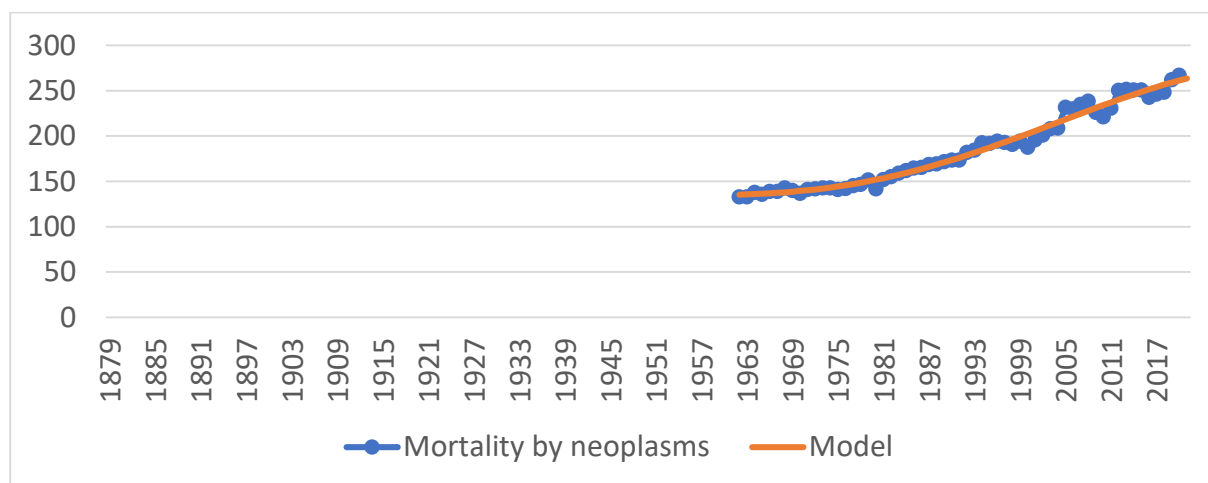
a fact that the migration processes, together with other purely internal processes,⁸ This led to serious changes in the ethnic composition of the Bulgarian nation. To what extent and how this affects the quality of our workforce is a problem that deserves attention.

Social indicators

Health status of the population

Figure 8

Mortality by neoplasms (per 100,000 of the population)

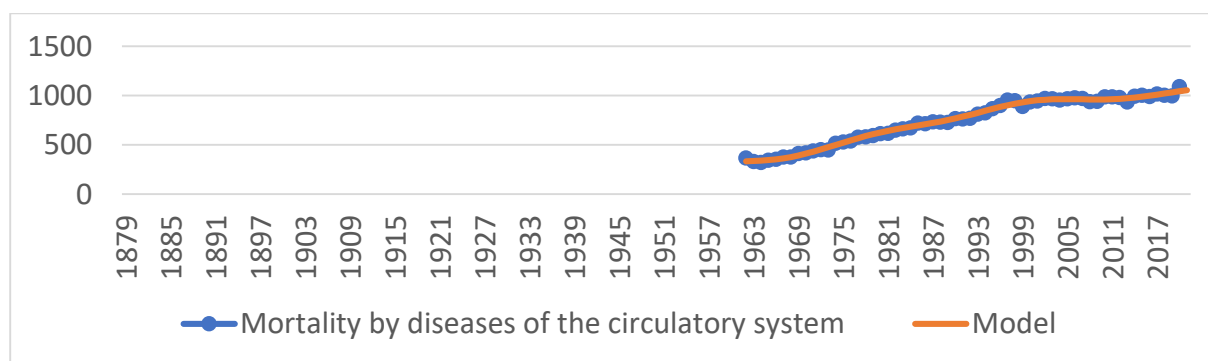


Note: Source: NSI and own calculations

Throughout the period from 1962 to 2020, mortality from neoplasms increased. In 2005 the increase was accelerating, and from 2006 the increase was slowing down.

Figure 9

Mortality by diseases of the circulatory system (per 100,000 of the population)



Note: Source: NSI and own calculations

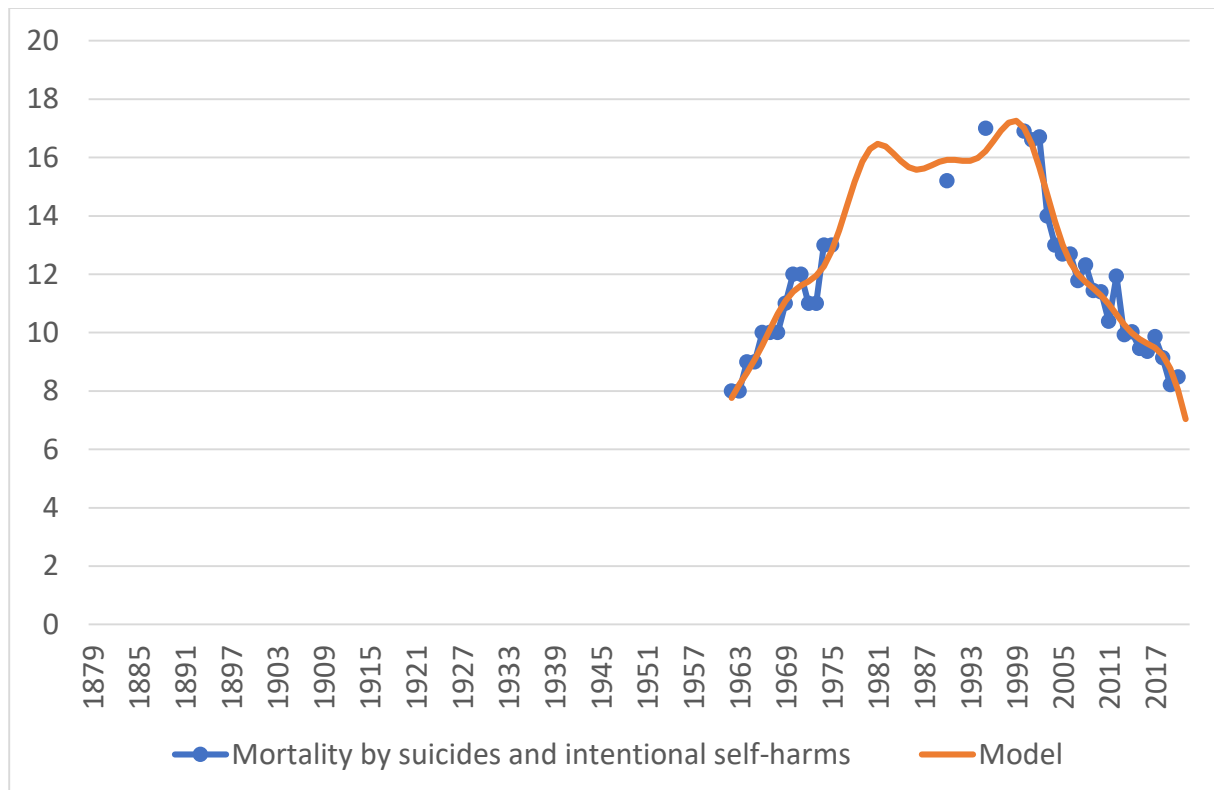
⁸ For example, the low birth rate of ethnic Bulgarians and the relatively high birth rate of Bulgarians of Roma origin.

In the case of mortality caused by diseases of the circulatory system, we can distinguish several subperiods:

- From 1962 to 1975, there was an accelerating increase;
- From 1976 to 1985, there was a slowing increase;
- From 1986 to 1994, there was an accelerating increase;
- From 1995 to 2005, there was a slowing increase;
- From 2006 to 2007, there is an accelerating decline;
- From 2008 to 2009, there is a slowing decline;
- From 2010 to 2018, there is an accelerating increase;
- From 2019 to 2020 there is a slowing increase.

Figure 10

Mortality by suicides and intentional self-harms (per 100,000 of the population)



Note: Source: NSI and own calculations

The picture of mortality by suicides and intentional self-harm is quite complex and is further complicated by the missing values for a long subperiod. Therefore, only the part of the

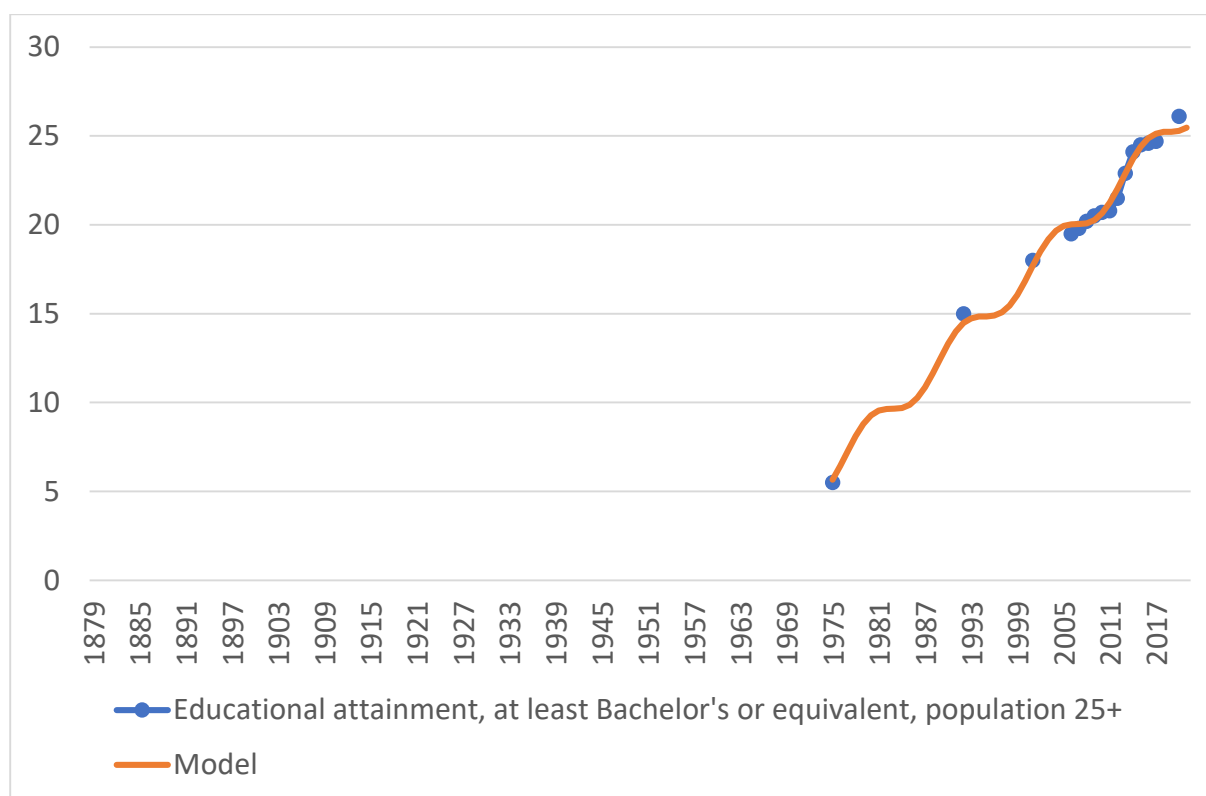
model after 2000 will be commented on. In the period from 2000 to 2020, the mortality rate from suicides and intentional self-harms decreased, and five subperiods can be distinguished:

- From 2000 to 2003, the decline is accelerating;
- From 2004 to 2009 the decline is slowing down;
- From 2010 to 2013, the decline is accelerating;
- From 2014 to 2016, the decline is slowing down;
- From 2017 to 2020, the decline is accelerating.

State of education

Figure 11

Educational attainment, at least Bachelor's or equivalent, population 25+ (%)

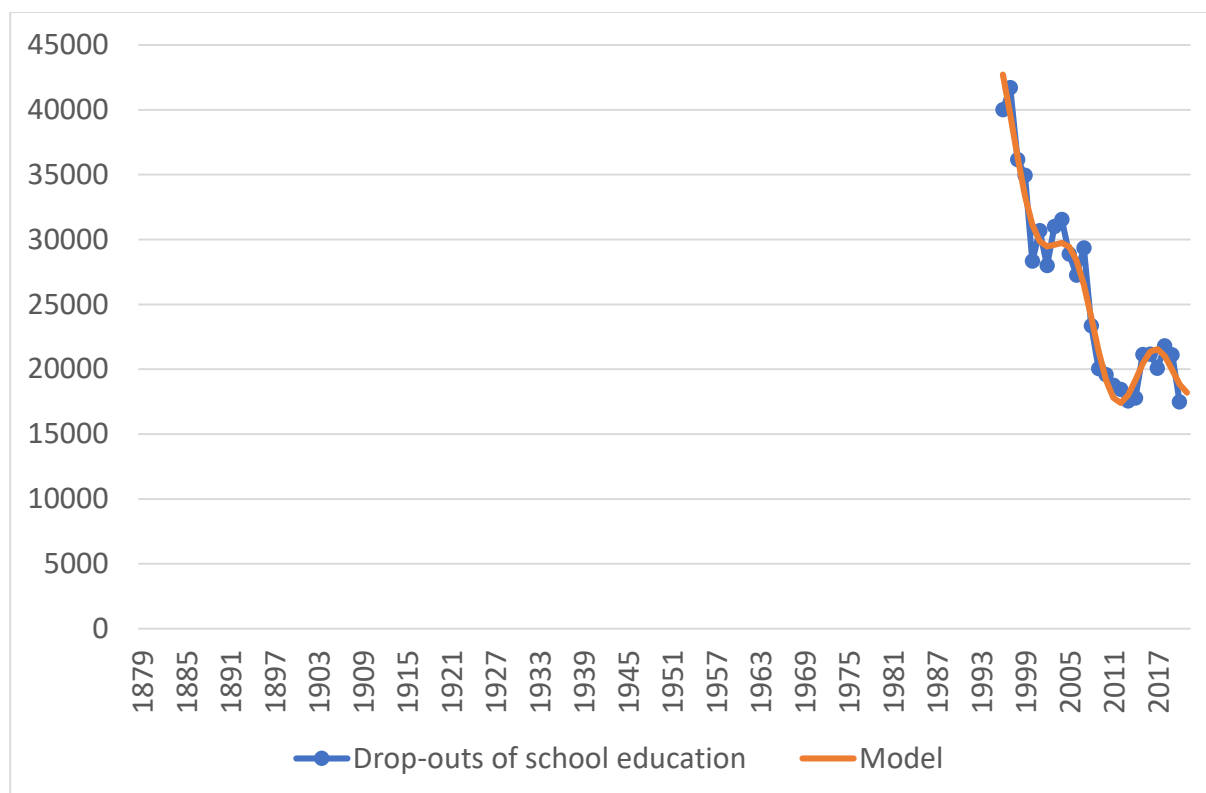


Note: Source: World Bank and own calculations

Again, the picture is complex, and there are missing values for a long subperiod. Therefore, only the part of the model after 2006 will be commented on. In the period from 2006 to 2020, the share of persons aged 25 and over with at least a Bachelor's education is increasing, and four subperiods can be distinguished:

- From 2006 to 2007, the increase is slowing down;
- From 2008 to 2013, the increase is accelerating;

- From 2014 to 2019, the increase is slowing down;
- In 2020, the increase was accelerating.

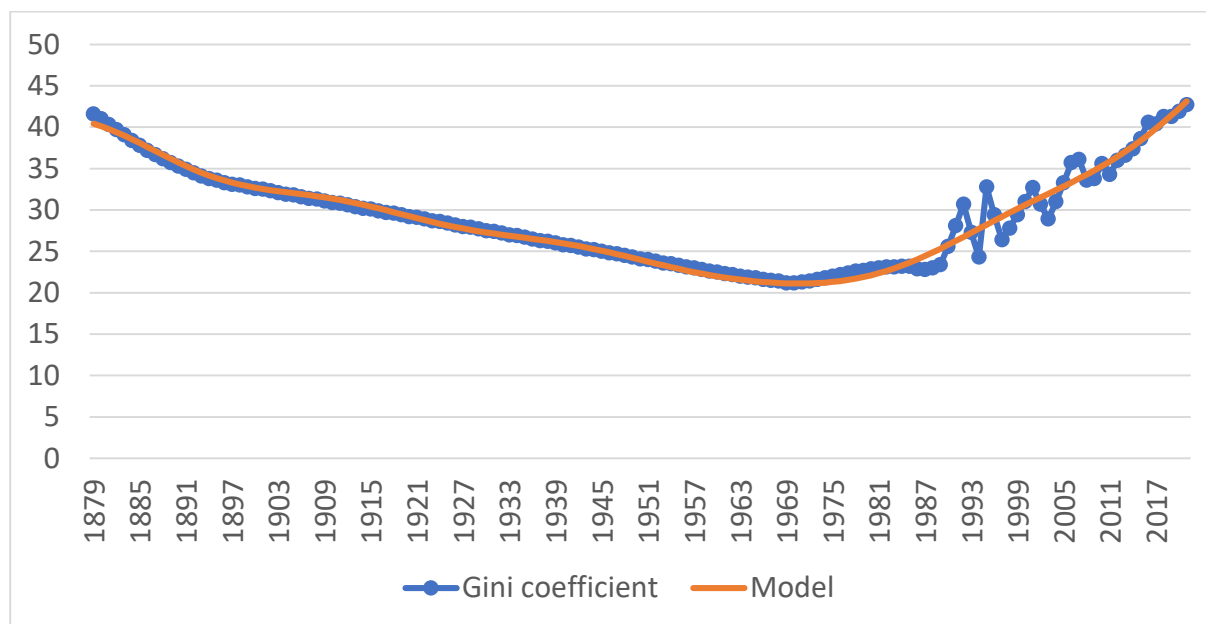
Figure 12*Drop-outs of school education (number)*

Note: Source: NSI and own calculations

We can highlight several subperiods in the dynamics of drop-outs of school:

- In 1998 there was an accelerating decline;
- From 1999 to 2002, there was a slowing decline;
- From 2003 to 2004, there was an accelerating increase;
- From 2005 to 2009, there was an accelerating decline;
- From 2010 to 2012, there was a slowing decline;
- From 2013 to 2015, there was an accelerating increase;
- From 2016 to 2017, there was a slowing increase;
- From 2018 to 2020, there was an accelerating decline.

Income inequality

Figure 13*Gini coefficient*

Note: Source: gapminder.org and own calculations

We can highlight several subperiods in the dynamics of the Gini coefficient:

- Until 1970 there was a decline;
- From 1971 to 1994, there was an accelerating increase;
- From 1995 to 2003, there was a slowing increase;
- From 2004 to 2020, there was an accelerating increase.

Analysis of social indicators

The dynamics of social indicators do not indicate the extermination of the Bulgarian nation in the period of the descending phase of the generational cycle of Simon Kuznets – from 2008 to 2020. During this period, the ruling class did not pursue a deliberate policy of extermination. During this period, except for a short break, the party – Citizens for European Development of Bulgaria (CEDB)⁹ rules, what can we say about this government regarding the dynamics of social indicators?

Regarding mortality by neoplasms, CEDB find a negative¹⁰ Trend, which, however, is slowing down. During their governance, the slowdown continued.

⁹ CEDB's governance began in 2009.

¹⁰ The words "positive" and "negative" are not used in their mathematical sense but as estimates. The decrease in mortality is positive, while the increase in income inequality is negative.

Concerning mortality by diseases of the circulatory system, CEDB found a positive slowing trend, as in the first year of their governance, the trend reversed from positive to negative. This continues until 2019 when the trend remains negative but begins to slow.

Regarding the mortality by suicides and intentional self-harms, CEDB found a positive slowing trend. During their governance, the positive trend is maintained, alternating periods of acceleration with periods of the slowdown of this positive trend.

Concerning the share of persons aged 25 and over with at least a Bachelor's education, CEDB finds a positive accelerating trend. During their governance, the positive trend continued, and from the first year of their mandate, the positive trend began to slow down. The positive trend accelerated again in 2020.

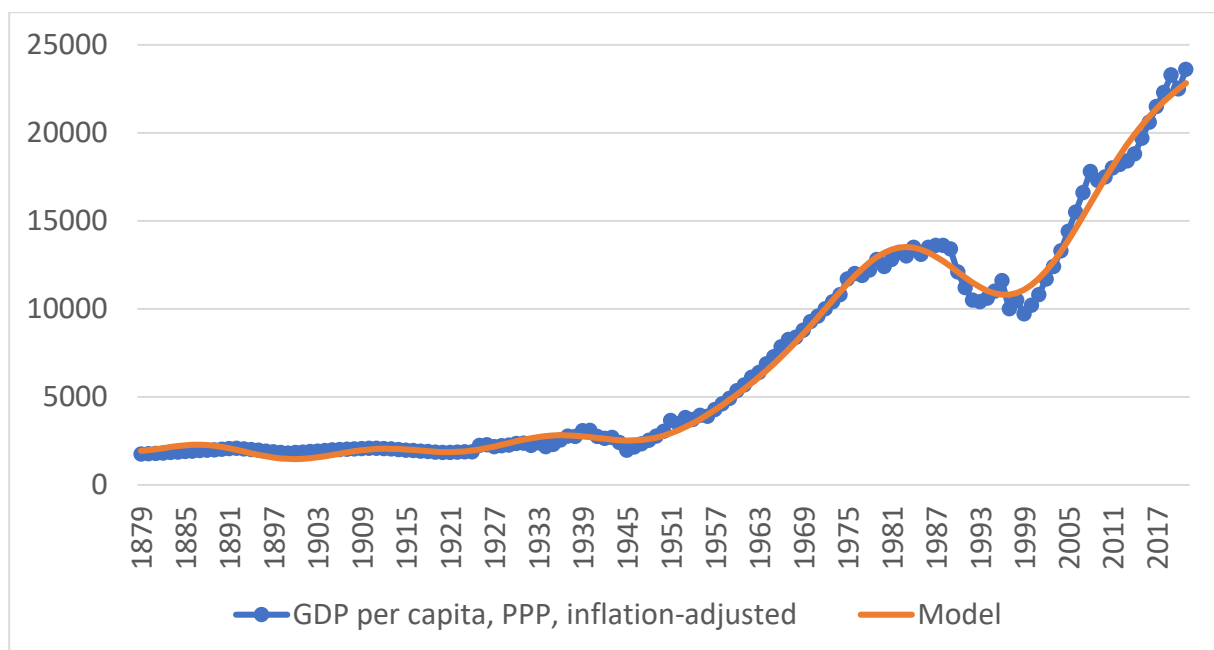
Concerning drop-outs of school, CEDB finds a positive accelerating trend. However, in the first year of their mandate, this positive trend began to slow down, and in 2013 the trend reversed and became hostile. This trend reversal can be attributed to the rule of P. Oresharski, the negative trend continued until 2017, and from 2016 it began to slow down. In 2018 the trend reversed and became positive.

Regarding the Gini coefficient, CEDB found a negative trend that is accelerating. During their governance, the acceleration of the negative trend continues.

Economic indicators

Figure 14

GDP per capita, PPP, inflation-adjusted (dollars)



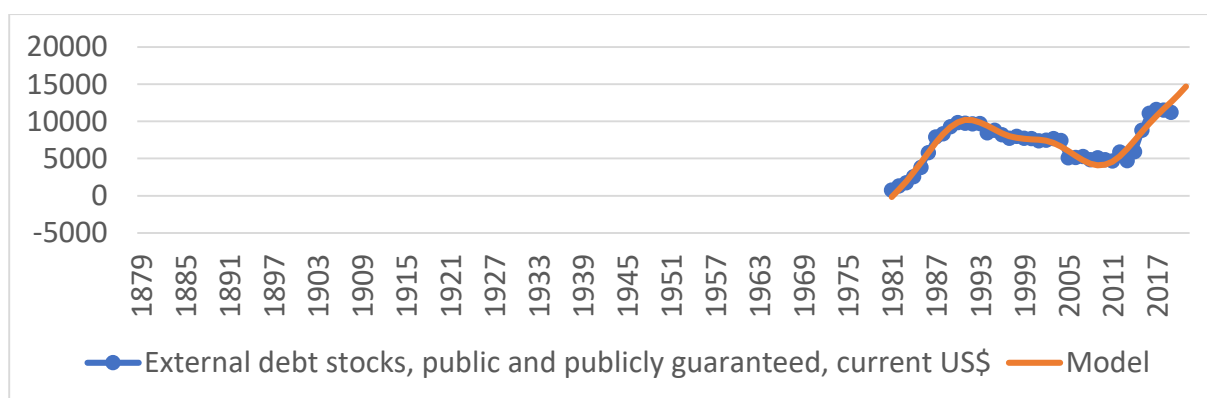
Note: Source: gapminder.org and own calculations

There are four periods in the dynamics of GDP per capita in purchasing power parity inflation-adjusted. The first one is from the Liberation to the mid-1940s. During this long period, there has been some increase in GDP per capita, but it is insignificant. There was a decline during World War II. The second period is from the mid-1940s to the late 1980s. During this period, there was a significant increase in GDP per capita. The reason for this is the secondary bourgeois revolution carried out on September 9, 1944, as a result of which the establishment of the capitalist mode of production in Bulgaria was greatly accelerated. Industrialization, urbanization, building health and education systems, etc., are also accelerating rapidly. The third period is from the late 1980s to the late 1990s. This period is characterized by a significant decline in GDP per capita in purchasing power parity. This is because on November 10, 1989, an internal party coup was carried out in the ruling party – the Bulgarian Communist Party, and the next secondary bourgeois revolution began – the transition from Soviet to corporate state capitalism. This transition was made by the "sons" of the revolutionaries who carried out the September 9 Revolution of 1944 through three successive price shocks. It turns out that the "sons" do not have the qualities of "fathers" (Naidenov, Haralampiev, 2020). Accordingly, social transformation is carried out in the worst possible way. The decline in GDP per capita in purchasing power parity is natural and is an expression of the incompetence and organizational weakness of the "sons" generation. The fourth period is from the late 90's – until now. It has a significant GDP per capita growth rate in purchasing power parity – higher than after the September 9 revolution.

For the period of the descending wave of the generation cycle of Simon Kuznets – from 2008 to 2020, we do not find any differences in the dynamics of GDP per capita compared to the previous period.

Figure 15

External debt stocks, public and publicly guaranteed (dollars)



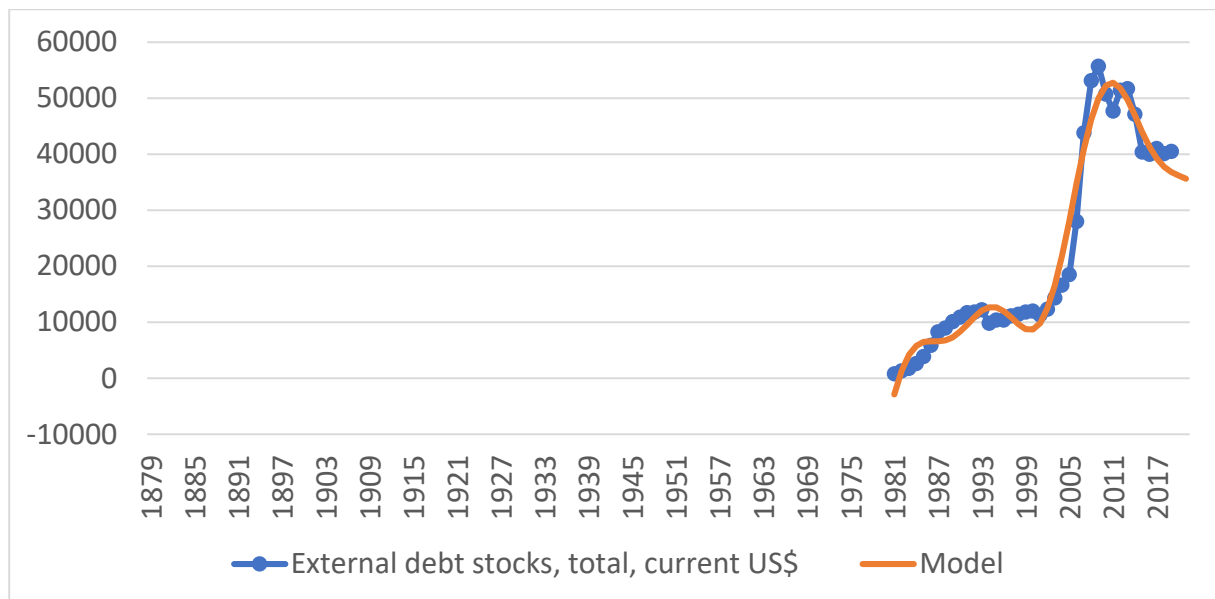
Note: Source: gapminder.org and own calculations

Three periods are clearly distinguished in the external public and publicly guaranteed debt dynamics. The first was from the early 1980s until 1989. During this period, there was a sharp rise in external public debt. The reason is that since 1976 a new phase in our development has begun, in which management efficiency is deteriorating qualitatively (Naidenov, 1986; Naidenov, Haralampiev, 2013). Reduces return on investment. The ruling class is trying unsuccessfully to readjust the economy from extensive to intensive development. To this end, he takes more and more loans. But since the descending phase of the Kondratiev long wave began during this period, the results were negative. At the end of the 1980s, the collective capitalist – the nomenclature of the Bulgarian Communist Party – went bankrupt. Proof of this is the moratorium on foreign debt payments. The second period is from the early 1990s to the end of the first decade of the 21st century. During this period, the gradual repayment of foreign debt began. The third period is from the end of the first decade, during which the rule of CEDB began until now. During this period, the external public debt increased rapidly. The rate of increase, although more minor, is still quite close to that of the 1980s.

It is at the rate at which the external public and publicly guaranteed debt is increasing for the period of the descending wave of the Simon Kuznets generation cycle – from 2008 to 2020, that we find a significant difference compared to the previous period. Together with the results of a study of social stratification, we can now conclude that during the rule of CEDB (2009-2020), the ruling class **steals a lot**.

Figure 16

External debt stocks, total (dollars)



Note: Source: gapminder.org and own calculations

Gross external debt has been growing steadily since the 1980s. This growth is due to an increase in public debt, as in practice in Bulgaria, there is no private property to take foreign loans. Following the ongoing transformations in the economic system and the increase in personal property, total external debt began to increase rapidly in the first decade of the 21st century. Private companies are following the "good" example of the public sector. During and after the global economic crisis, total external debt began to fall.

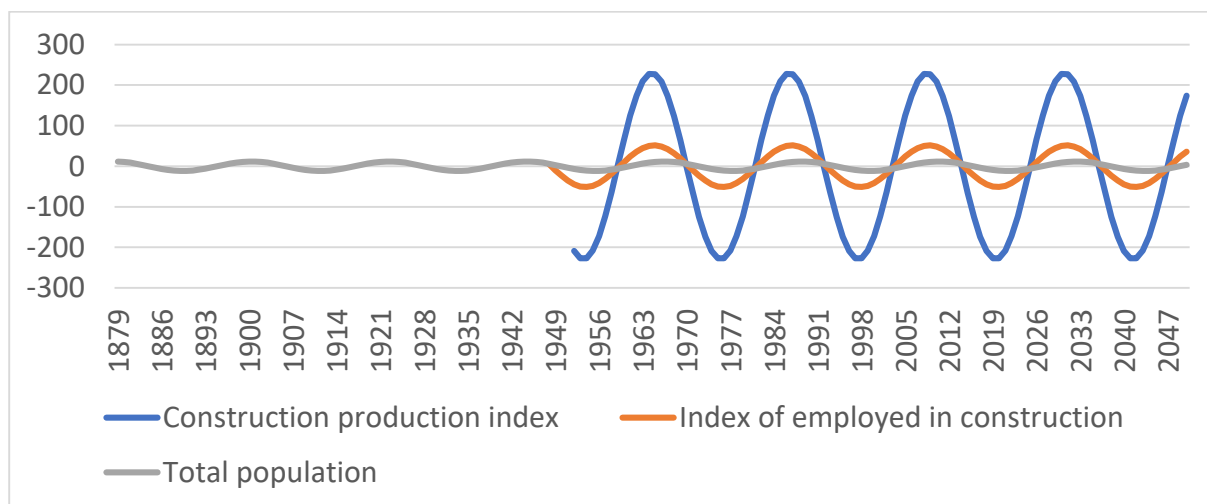
We also examined loans to non-financial corporations, loans to households, and non-profit institutions serving households, as well as foreign direct investment. These three indicators, as well as the indicators of total external debt and GDP per capita in purchasing power parity, do not show anything different from other periods, which leads to the conclusion that during the period of the descending phase of the generational cycle of Simon Kuznets began the extermination of the Bulgarian nation. Only in the case of external public and publicly guaranteed debt in this period is something different observed – its sharp rise. This shows that the governance of CEDB during this period is exceptionally thievish. But not that there is an extermination.

In general, the data of the studied economic indicators show that in the period of the descending phase of the generation cycle of Simon Kuznets, there is no extermination of the new working-active generation.

Simon Kuznets' generational cycles – eight years later

Figure 17

22-year cycles of construction production index, index of employed in construction, and total population



Note: Source: own calculations

After applying the Bayesian periodogram analysis, it was found that in addition to the construction production index and the employed index, there is also a 22-year cycle of the total population. These three cycles are very synchronous. This allows extrapolation for one cycle ahead – until 2050. Thus, it is established that the next descending phase of the generational cycles of Simon Kuznets will be in the period 2030-2043.

Conclusion

The study of demographic, social, and economic indicators convincingly shows that in the period of the descending phase of the generational cycle of Simon Kuznets – 2008-2020, there is no extermination of the Bulgarian nation. The extermination of the new working generation will be in the next descending phase of the Simon Kuznets generation cycle. Extrapolation shows us that it will be from 2030 to 2043.

We can "narrow" this period by considering the impact of external factors. Because in the exterminations of the previous three generations, the effect of external factors is powerful. The most important external factor for the forthcoming extermination is the dynamics of Kondratiev's long waves and the US military budget. In earlier studies of the dynamics of the long locks of Kondratiev and the US military budget, we have already pointed out that the risks of world war and, consequently, the extermination of the Bulgarian nation are in the period 2035-2043 (Naidenov, Haralampiev, 2017), within the descending phase of Simon Kuznes' generational wave. Therefore, in the period 2035-2043, three risk factors overlap. Whether the conditional Rothschilds will move the center of world trade from the United States to China and overthrow the dollar as a world currency through a world nuclear war and accordingly exterminate humanity and the Bulgarian people, in particular, will be known to future generations. God forbid, now, when they have Putin's nuclear staff, to carry out this transformation just by "swinging" it.¹¹ There is such a possibility. It is not big. But it still creates a little optimism.

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¹¹ On February 27, 2022, Supreme Commander-in-Chief Vladimir Putin ordered the Minister of Defense and the Chief of the General Headquarters to bring the containment forces into special combat duty. This means that after killing the Russians for decades, the conditional Rothschilds finally managed to force them to accept their historical destiny – to be the judge for the third century in a row in the battle between the old center of world trade and the new contender. The fate of the Russian people is tragic. So far, twice – in the 19th and 20th centuries with enormous sacrifices, torments, and sufferings, they awarded victory to the Anglo-Saxon naval empire. Now, if the conditional Rothschilds manage to force them, there is a chance, through a preemptive nuclear strike on the United States, to give victory for the first time to a continental empire – China. And the conditional Rothschilds, integrated with the Khan's elite, to take revenge on their age-old enemies – the conditional Rockefellers.

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