

NOTES

ROMANIA'S WEALTH ESTIMATIONS BEFORE THE SECOND WORLD WAR

BY LUCIAN TURDEANU AND NICOLAE MARCU

Bucharest

Estimates of national wealth for Romania exist only for the twentieth century. In previous centuries there were only theoretical discussions pointing out the sources of growth and the contents of wealth.

The first estimates of Romanian national wealth were made about the time of the first World War, by I. N. Angelescu and N. Xenopol, and the first valuation of agricultural wealth was made by Mihai Serban in 1914.

I. N. Angelescu, in the study *Avuția Națională a României (Romania's National Wealth)*, 1915, valued agricultural land, forests and fisheries at 19.1 billion gold lei, which represented 70 percent of his estimate of aggregate national wealth of 28.8 billion lei. Industrial and commercial funds, valued at 5 billion lei, represented 18 percent. The remainder consisted of urban structures, public buildings, railways and shipping, subsoil assets, the stock of precious metals and claims on foreign debtors.

N. Xenopol, in his work *La richesse de la Roumanie* published in 1916, presented an improved valuation of agricultural land, forests and fisheries. He estimated incomes on the basis of the Fiscal Census, while Angelescu had considered income to be net production value. Statistical data concerning agricultural output being uncertain, Angelescu's estimate is overvalued. Xenopol corrected the fiscal data and compared his valuation with that of M. Serban, who in his work *Problemele noastre social-agrare* (Our social-agricultural problems) published in 1914 utilized the same capitalization method, regarding land lease prices as income and considering these to be equal to a four percent interest rate (like Serban), whereas Angelescu used a five percent interest rate. Xenopol applied the value derived in this way to large properties, while for small properties he took the average land purchase prices paid by the Rural Office (Casa Rurală). This methodology is a proper one, and reflects Xenopol's analytical and critical spirit.

M. Serban's estimate covers agricultural machinery and equipment as well as livestock, on the basis of census data (used by Xenopol). Xenopol valued agricultural properties at 13.5 billion gold lei, 58 percent of the aggregate national wealth of 23 billion gold lei, compared with the value of 10.2 billion lei established by Serban for agricultural land, forests and vineyards and agricultural inventories. The difference arises from lower prices used by Serban for small properties

(Xenopol considered that only the most unproductive lands were offered to the Rural Office for purchase) and to price differences between the dates of the two estimates (1912 and 1916).

It may be observed that Angelescu utilized a more appropriate method of valuing forests, taking timber and land separately and calculating an average of 40 years for timber turnover. This procedure was based, however, on potential and not actual forest exploitation.

Sizable differences may be noted between Angelescu's and Xenopol's estimates of industrial and commercial wealth. Angelescu valued this component at 5 billion gold lei, exaggerating the estimate of wealth in small industry and trade because he utilized coefficients that were too high in deriving incomes and capital from transfer taxes. Xenopol's estimate was 2.8 billion gold lei.

Xenopol also valued structures, oilfields, and State wealth, from which he [incorrectly] deducted the 1915 public debt. In his estimate, net 1915 national wealth—after deduction of the public debt—was 21.5 billion gold lei, whereas Angelescu's estimate for 1915 was 26 billion gold lei. The latter calculated national wealth per capita at 3714 lei—half the corresponding figure for France or England. Xenopol estimated that Romania's national wealth in current prices had trebled in the 30 years preceding World War I.

The estimates of Xenopol and Angelescu were subsequently analysed by Dimitrie I. Gheorghiu, who estimated 1916 national wealth at a value near that of Xenopol, adding subsoil wealth according to the estimates of C. Alimănişteanu and reaching a total of 30 billion gold lei.

M. Dobrovici, starting from Angelescu's estimate and relying on Alimănişteanu's estimates, established a national wealth value of 36 billion gold lei.

After the First World War, the first estimate of agricultural wealth was made by D. G. Creangă in 1927, relying on the 1923 Fiscal Census and yielding a value of 30 billion gold lei.

The first postwar estimate of the country's aggregate wealth was again made by Angelescu in 1929, on the basis of 1927 data; he valued agricultural land at 42.7 billion gold lei—implying an exaggerated average price of 2,500 lei per hectare (as he had also done in his 1915 estimates)—and forests according to the same method at 8 billion lei. He also valued State productive wealth at 6.2 billion gold lei, half of which he allocated to estimated capital invested in railways. The rest of enterprise wealth he estimated on the basis of the capitalization method.

Virgil Madgearu, in his work *Rumania's New Economic Policy*, published in London in 1930, put the value of State enterprises' invested capital at 4.5 billion gold lei. Adding an estimate of the value of concessions of monopoly rights of 1.7 billion lei, we obtain a total value equal to Angelescu's. He estimated the aggregate value of national wealth at 69.2 billion gold lei, from which he [again erroneously] deducted 4 billion lei of public debt. This total also included structures and industrial and commercial wealth. The value of the public domain was not included.

For the 1930–40 period, many national wealth components may be estimated on the basis of data included in the works of Roman Moldovan [1], Virgil Madgearu [2], Lucrețiu Pătrășcanu [3], Victor Jinga [4], Mihail Manoilescu [5],

Gh. Tașcă [6], and others. Nearly all components of national wealth were valued by N. Georgescu-Roegen [7] for 1939 and by Lucian Turdeanu [8] for 1940.

Georgescu-Roegen estimated Romania's national wealth following a proper methodology, which also covered the public domain and monopoly rights. Agricultural lands belonging to individuals were valued together with those belonging to the State according to the indirect method relying on taxable income, which he multiplied by 20. He compared the results with the values established by N. Cornățeanu and by the Agricultural Research Institute. For rural buildings, the average value of buildings per hectare established by Cornățeanu was used. Urban buildings were valued by capitalizing with the State Inventory. For agricultural inventory the per hectare average value of livestock, machines and equipment following Cornățeanu was used. The wealth of industrial enterprises was valued on the basis of data on fixed assets. Financial assets of individual firms were valued on the basis of taxable income. Monopoly rights were valued on the basis of incomes, and State movable wealth on the basis of its inventory. By totalling the values of national wealth elements, Georgescu-Roegen arrived at a minimum value of 1,337 billion and a maximum of 1,391 billion paper lei, figures that we consider to be an index of the order of magnitude. In the minimum estimate, land represents 23 percent, structures 40 percent, and enterprises' fixed assets and trade funds 30 percent.

The last estimate of national wealth was made for 1940 by Lucian Turdeanu [8], including completely for the first time potential energy and subsoil wealth. However, human resources were not included. A complete valuation of public wealth is presented, including the wealth of State enterprises and of local government enterprises on the basis of balance sheets, the fixed and movable assets of institutions, religious organizations, and districts and communes, and also the public domain, on the basis of the public inventory. Agricultural lands and forests were valued on the basis of a critical analysis of data in the *Statistical Atlas* of the Ministry of Agriculture and in Romania's *Statistical Yearbook*, the State lands being valued separately. After application of growth coefficients, a value of 336 billion lei was reached for 1940. (Georgescu-Roegen had obtained as a maximum 395 billion lei, including State lands.) For rural buildings the per hectare average value of construction—following Cornățeanu—was calculated for the cultivable area, and not for the aggregate agricultural area as Georgescu-Roegen had done. Urban buildings were valued on the basis of fiscal data, completed and adjusted. Industrial, banking, and commercial wealth was estimated on the basis of data in the *Statistical Yearbook*, and the wealth of individual enterprises on that of taxable income. In the category of goods not yielding income, household furniture was valued at 10 percent of the value of the structure, and vehicles according to statistical data. Public wealth, including monopoly rights, was put for 1940 at 504 billion lei (15.9 billion gold lei) representing about 30 percent of aggregate national wealth. Comparing this value with those obtained by Angelescu and Madgearu in 1929, 6.2 billion gold lei, the increase was approximately 10 billion gold lei. For State enterprises the lack of income was notable except for the monopoly units; their contribution to State income was scarcely one percent. Subsoil wealth was valued in 1940 at 532 billion lei, relying on the analysis of

data concerning known and probable reserves, average prices, production and production costs.

In summary, it appears that until the Second World War two methods were mainly used in Romania in estimating national wealth, following the specialized literature of the time. The income capitalization method was used by some estimators (Xenopol, Angelescu, and others) for agricultural land, forests, buildings, and trade and industrial funds. This is an indirect method relying on taxable incomes, which were capitalized at the current rate of interest. The second method was that of inventory—a direct method—based on available quantitative data and purchase or cost prices. It was used by Serban in estimating agricultural lands and machinery. For agricultural, industrial and banking wealth economists used published data in Yearbooks or Statistical Atlases, while for State, district, communal and other public organization wealth public inventory data were used. State and communal enterprise wealth was valued on the basis of their inventory and balance sheet data. Human capital was not estimated in Romania in this period.

At the present time estimation methods are being much improved and new computerized methods are being worked out, simplifying and facilitating considerably the task of processing a huge quantity of statistical information.

REFERENCES

- [1] Moldovan, Roman. (1939), *Formarea și mișcarea capitalurilor în România în perioada 1925-1938* (Formation and dynamics of capital in Romania between 1925-1938).
- [2] Madgearu, V. (1940), *Evoluția economiei românești după războiul mondial* (The Evolution of the Romanian Economy after the World War).
- [3] Pătrășcanu, L. (1946), *Problemele de bază ale României* (Romania's Fundamental Problems).
- [4] Jinga, V. (1945), *Problemele fundamentale ale Transilvaniei* (Fundamental Problems of Transylvania).
- [5] Manoilescu, M. (1929), *Théorie du Protectionisme et de l'Échange International* (Theory of protectionism and of International Exchange).
- [6] Tașcă, G. (1931), *La Situation Économique de la Roumanie* (Romania's Economic Situation).
- [7] Georgescu-Roegen, N. (1943), *Avuția Națională—în Enciclopedia României* (National Wealth—in Romania's Encyclopaedia).
- [8] Turdeanu, Lucian. (1941), *Avuția Publică în România* (Public Wealth in Romania), and (1947), *Avuția Națională a României* (Romania's National Wealth).