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TIME BANKS VS HOUSEHOLD PRODUCTION THEORY AND THREATS TO THE FISCAL SECURITY OF THE STATE

BANKI CZASU A TEORIA PRODUKCJI DOMOWEJ I ZAGROŻENIA BEZPIECZEŃSTWA FISKALNEGO PAŃSTWA

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Summary: The aim of the article is to demonstrate that time banks are an example of one of the many models of a cooperation economy, including a shared way of life. We can place them in the category of so-called *household production*. The research on this issue was conducted by American economist Hazel Kyrk (1886-1957), a founder of the so-called home economics. According to Kyrk's theory, time banks are a part of household production, which is free of charge and enables to use resources of households in a more efficient way. The authors used the historical method and the method of the critical analysis of literature.

Keywords: time banks, financial security, cooperation economy, household production, security threats.

Streszczenie: Celem artykułu jest wykazanie, że banki czasu są jednym z wielu modeli gospodarki współpracy, w tym współdzielonego stylu życia. Możemy zakwalifikować je do kategorii tzw. produkcji domowej. Prekursorką badań dotyczących produkcji domowej była amerykańska ekonomistka Hazel Kyrk (1886-1957), twórczyni specjalności zwanej ekonomiką domu. Zgodnie z teorią H. Kyrk banki czasu są częścią produkcji gospodarstw domowych, mającej charakter nieodpłatny i pozwalających na wykorzystanie zasobów gospodarstwa domowego w bardziej efektywny sposób. Metodami wykorzystanymi w pracy są metoda historyczna i metoda krytycznej analizy literatury.

Słowa kluczowe: banki czasu, bezpieczeństwo finansowe, gospodarka współpracy, produkcja gospodarstwa domowego, zagrożenia bezpieczeństwa.

1. Introduction

Time banks are projects which gained in importance with the development and dissemination of the cooperation economy, called *collaborative economics*, defined and described by K. Savage and D. Symonds [2018, pp. 311], R. Botsman and R. Rogers [2011, pp. 280], V. Hatzopoulos [2018, pp. 320] and J.S. Ellis and T. Morrison [2014, pp. 165]. Properly functioning time banks should assist the development of various forms of mutual assistance, but also free of charge services, favours etc. in exchange for other forms of returning the favour.

The development of information and communication technologies (ICT), in particular the professionalization of the Internet, enabled access to bank time resources and skills to became open and quick, and the ability to place announcements and other entries allows to reach their content both in local, regional and global reach.

The aim of the article is to demonstrate that time banks are activities which fit in the assumptions of the household production theory by Kyrk (1886-1957) modified by various economists, but can also generate different threats relevant from the point of view of the financial security of the state. The article focuses on selected issues described by the author in the work entitled "The theory of the household production by Hazel Kyrk and its significance for the economy of the 21st century and the financial security of the state" [Stępnicka 2019]. This work is theoretical and may constitute a contribution to further discussion on new forms of activity in the economy of cooperation, as well as other additions to the theory developed by Hazel Kyrk, which so far have not been widely discussed in the UK and in Poland. The main methods used in the work are the historical method and method of the critical analysis of literature.

2. The origins and characteristics of the concept of time banks

Time banks is a concept, an activity model in the economy of the 21st century, in the form of so-called alternative economics, a trend which is a part of the cooperation economy and a form of an extensive network of neighbourhood, community and social aid. These are also called a new sustainable provisioning system (cf.: [Seyfang 2009, p. 202]), as well as the non-commercial exchange of skills between users who offer different services (e.g. gardening, DIY, help with shopping or taking a dog for a walk) in a form similar to barter [Szymanski 2013, p. 65]. They are a copy of the project and views of American inventor and writer Josiah Warren (1798-1874), called "the idea of the time warehouse". He introduced this idea spontaneously in local communities as a "bottom-up initiative" in which one hour of work was the equivalent of one hour of another work. This concept also included an exchange of a good for another one based on the so-called "negotiable rate of the number of hours needed to produce each product in order to determine the exchange rate for a variety

of goods" [Modrzejewska 2012, p. 183]. The roots of time banks were described by B. Jamka according to whom "they date back to the 19th century, when Robert Owen, a Welsh utopian socialist and pioneer of the cooperative movement, tried to implement the concept of a time-based currency in which the exchange of goods was effected by means of labour notes: the manufacturers would receive the labour notes in exchange for their work. The notes would be the base for an equivalent in other goods" [Jamka 2018, p. 166] (cf.: [Lebra 1984]).

In reference to the views presented by Warren, since the 1980s there can be seen an increased interest in the idea of the time warehouse, i.e. the project of time banks, which was created by American sociologist and lawyer Edgar S. Cahn [Seyfang 2012, p. 150]. During this period, time banks became a response to the erosion of social networks and informal support for society, which in Cahn's opinion is the basis of society, but also the core of the economy.

The most important rules, on the basis on which time banks function, are:

- drawing attention to the possibility of sharing resources and skills;
- nurturing principles of reciprocity and exchange, with the decline of dependencies;
- increasing the value of social capital and the encouragement to learning and sharing skills;
- a redefinition of the concept of "work", as a chargeable service and also with the inclusion in this term free of charge services done for the community [Seyfang 2012, p. 150].

Cahn is also a creator of a payment unit of time, called Timedollars, and a rule for conversion activities done by the local community into so called "timedollars", so that one can replace or purchase other services, usually associated with the household (e.g. cleaning, shopping, mowing the lawn). According to Stella Osorojos [2011, p. 118], the concept of Timedollars was established in 1980, when Cahn was recovering from a heart attack. It was supposed to be a way to fix the chronic lack of funds needed for solving important social problems. The payment unit was to be seen as a self-help mechanism for the poor, the socially and professionally excluded, but also encourage the building and strengthening of relationships in local communities [Nowalska-Kapuścik 2017, pp. 32-33; Modrzejewska 2012, p. 182] (cf. [Cahn 2004]). In accordance with the rule, Timedollars was converted into hours ("give an hour-take an hour"), and each time period was supposed to be equal. The difference from barter was that it was based on exchange based on time, not monetary value (cf. [Osorojos 2011, p. 118]).

The functioning of time banks is based on several social and economic values (cf. [Valek, Bures 2018, p. 34]), described by Edgar S. Cahn in the form of four principles:

• equivalence ("devoting an hour to help someone you get one time credit/time dollar", which is equal to one hour);

Applicable rule: an hour is equal to so called time credit or one timedollar (cf. [Lee 2016, p. 5]).

- the equivalence of provision ("a person receiving help from someone should pay him/her back and provide aid at a value of a one-time credit/time dollar");
- the equivalence of skills ("each skill has the same value");
- barter ("repayment is done by helping someone") (cf. [Modrzejewska 2012, p. 182; Farrel 2010, p. 1558]).

Time banks is a non-commercial form of exchange. According to Magnuszewska²: "in time banks there is no valuation of services as it is not a typical barter, and we should look at it as a group of people who want to help each other, and those who are currently in need of assistance. Saving hours already worked on individual accounts is rather a form of social insurance: when I am in need, other members of a time bank will help me by giving me their time and skills. In time banks, there are often people who do not use the earned hours as they come there to give. There are also those who only get help as for health reasons they are unable to give it back. It is a good thing, when they can find a way to do it, but this does not always happen" [Magnuszewska 2004]. This is because time banks are not perceived as economic projects but rather social ones (cf. [Lee 2016, p. 4]). Some people, however do not completely agree with it. For example M. Gill Seyfang [2012, pp. 193-206] states that they represent a new economic initiative (but also social), created and functioning around the community and embodying features of an alternate perspective onto the mainstream issues: the problem of wealth, perceiving work in a broader perspective, new understandings of the concept of "money" and the reintegration of ethics with economic life [Seyfang 2012, p. 202].

The analyzed form of activity is also a kind of economic category, which can be qualified as household production. The theory was first developed by American economist Hazel Kyrk (1886-1957), who together with Margaret Reid (1896-1991) and Elizabeth Ellis Hoyt (1893-1980) worked on the topic of consumption, household production and the so-called home economics. Time banks is also one of the many models of the cooperation economy, which is based on a shared way of life (cf. [Burgiel 2014, pp. 1010-1011]).

3. The theory of household production by Hazel Kyrk, and the functioning of time banks

The theory of household production, as well as the economic problems of families, is one of several issues researched by Kyrk. Other focused on the theory and research concerning problems encountered by consumers when they try to define their own concept of welfare and the role of women in the household, which in literature was called women's economics or feminist economics [Velzen 2003, pp. 38-55]. Kyrk's considerations on household production were covered in a publication entitled:

² Jadwiga Magnuszewska – a mathematician from Wroclaw University of Technology, with her husband Piotr Magnuszewski, a physicist, started the popularisation of time banks in Poland.

"Economic Problems of the Family" of 1933 (cf. [Kyrk 1933]), and then in other publications on the same topic from 1952 and 1953 (cf. [Kyrk 1952; Kyrk 1953]).

According to her theory "household production is based on the principle of self-help, free of charge exchange of various goods between members of the local community. Similarly, as the work of housewives is not-for-profit according to Kyrk, the exchange of products and services along with skills and knowledge, from the economic point of view does not generate revenue, but contributes to creating social or economic value that is in not accounted in statistics or measured. According to B. Jamka: "In recent history the precursor of time banks is Teruko Mizushima, who in 1973 in Osaka (Japan) established the Volunteer Labour Bank (a network for housewives). Her initiative was based on many years of considerations about women's lives (mothers, housewives) who after very demanding periods i.e. raising infants and young children, are going through periods of energetic surplus when their children go to school. This surplus can be transferred to the needy and taken back in old age or can be a form of repayment of the prior credit" [Jamka 2018, p. 166] (cf. [Lebra 1984]).

This theory denied the one presented by Thorstein Bund Veblen concerning the classification of apparent consumption and leisure time of housewives from the higher social classes. This theory was later modified by Kyrk herself when she began to perceive household production as an activity opposite to business, although in both activities the aim is to reduce costs, maximize revenue and other results (cf. [Stępnicka 2019; Jones 2016, p. 18]).

The theory of household production can be referred to as time banks, especially in terms of types of activities, Kyrk's theory concerns the analyzed projects related to the economy of cooperation. In fact all actions taken by housewives, in Kyrk's opinion, may be the subject of the provided services and favours and can be settled through the time banks. Both cases involve the process of the non-cash exchange of services and talents and consequently non-taxation, and the unit of account is time (i.e. an hour). Both analyzed forms do not function in legal transactions, do not have a legal personality, and their nature and manner of action in light of the theory by Kyrk and with regard to time banks do not correspond to the definition of business activity (cf. [Klimek-Michno 2011]).

The reinforcement for the statement that time banks fit into the assumptions of the theory of household production by Kyrk may also come from G. Lee [2015 p. 10], who stated that economic practice, including the functioning of the household, is located on the cusp of two economies: the so-called basic family economics, which is the subject of Kyrk's theory, and the market economy which combines all the other elements not included by Kyrk [Lee 2015, p. 10].

The functioning of time banks is based on the assumption that all people (along with their knowledge, skills and capabilities in terms of the provided services and favours) are resources. In the theory of household production, the resource are women working at home as housewives, who form an economic value invisible to

economy and statistics, called household production value. Similarly, in the case of time banks, in which the core is time and different activities offered for exchange, creating value is equal to the non-profit exchange of services, the household production performed by housewives has a similar character. In both cases, we can estimate the value of the service by specifying how many "timedollars" the activity costs.

In both cases, i.e. time banks and the theory of household production, significant meaning is assigned to reciprocity which is also basically the expectation of returning the favour in exchange for completed actions. In the case of time banks, this principle refers to the need or even the necessity to return a favour. This principle (at least in theory) is the the principle of Timedollars, which is the basic premise of the functioning of the analysed projects. With regard to the theory of household production, reciprocity can be perceived as the desire to estimate the value of work done by housewives, which can be compared with the work in professions that are subject to statistical and economic research.

New models of the economy in the 21st century, including those analysed in the article such as time banks constituting one of many economic activities in a collaborative economy, as well as household production, contribute to the creation of added value (economic and social), stemming from the redefinition of the concept of "time" and its recalculation (cf. [Jamka 2018, p. 167]). It is often a typical favour (help in cleaning, cooking, doing homework, DIY etc.). In addition, the services categorized within time banks contribute to the use of unused resources.

4. Threats to the fiscal security of the state resulting from the implementation of time banks

Time banks, being a part of a collaborative economy, have all the defects and limitations associated with this type of economy. They take the form of mainly legal, social and economic threats, including also financial and fiscal ones. This last group of threats has undoubtedly its background in legal conditions (legislative). As reported by K. Klimek-Michno, time banks in Poland have no institutionalised form. They do not work alone in the legal market, have no legal capacity and thus do not have a legal personality, but they are neither organisation units with legal personality. The nature and way of activity conducted within the framework of the time banks means that this activity does not correspond to the definition of economic activity. Although there is the principle of the universality of taxation, we cannot state that neighbourly help or other activity of a natural person i.e. providing support or free-of-charge services shall be subjected to the regulations of the personal income tax act [Klimek-Michno 2011].

The difficulties of a legal nature multiply also the new regulative problems, difficulties in the interpretation of the law, including tax and consumer, as well as

difficulties in the field of social security, employment, or blurring the boundary between consumer and supplier, professional and non-professional services, etc. (cf. [Kucharska 2019, p. 38]).

The most important threats to fiscal security resulting from time banks in the context of the theory of the household production by Kyrk include:

- creating "spontaneous, non-commercial initiative" (described in the previous considerations, as the bottom-up initiative) based on connection resources: knowledge, skills, experience, etc. without the participation of the market, as a place, process and mechanism typical for the market economy (i.e. the replacement of traditional activities on the market by the so-called non-market activity);
- the decline in interest in services of certain traditional economic activities offered by entities operating on a commercial basis which results in replacing them by those offered by time banks;
- the difficulties in determining the impact of time banks on the economy, especially in terms of the grey market, including tax law, unemployment level and other economic phenomena stemming from the lack of effective and objective measurement tools; this results in not including activities carried out within time banks in the official statistics and not including the value of services and favours into aggregated macroeconomic standards of gross domestic product and gross national product or other contemporary used measurement methods;
- the lack of, or inconsistency in legal regulations concerning tax obligation, especially in clarifying who and what is subjected to fiscalization in the case of providing services and favours within time banks;
- distortion of the informative function of price (due to the lack of a relevant price system), which does not reflect the P2P relationships in the context of time banks;
- the difficulty in the correct interpretation of the category of time and time optimization, its evaluation and measurement, that in relation to the analysed forms of activities takes a different meaning than in the case of activities typical of a market economy.

The list of risks in terms of economic security, including fiscal security, resulting from the operation of time banks has not been exhausted yet and because of the hybridisation of the models of a collaborative economy is constantly growing. Nevertheless the issues relating to law and tax policy in the collaborative economy and its models, as one of the main threats to the fiscal security of the state, have been the most extensive and constantly analyzed field of research, which so far have not found a systemic solution.

5. Conclusion

In accordance with the opinions adopted by different authors, time banks due to their business profile, i.e. the free exchange of products, services, favours, knowledge, time, etc., take the form of free of charge activities and the exchange of goods (from

the point of view of economic account) not focused on generating income, but creating social values, community integration and its development. This is undoubtedly a part of Kyrk's theory of household production, and allows to place these projects in the category of social initiatives, based on the principles of reciprocity and the principle of subsidiarity. The non-profit making nature of the services and favours, the ability to build relationships, understanding the need to exchange the "goodness for goodness" and the bottom-up activity, make time banks symbols which contradict the ostentatious consumption and draws attention to the number of production activities which can be undertaken in the household.

In relation to the economic conditions connected with the functioning of time banks (often ignored because of the social aspect of the aforementioned activities), it should be noted that they are also of vital importance. As a social innovation, they build and integrate new markets, and activate the excluded population etc. (cf. [Jamka 2018, p. 167]).

Taking into account the assumptions of a collaborative economy (the analysed projects operating within it) the economic aspect is visible for example in the measurement and value of time as an economic category, which should be dedicated for the performance of the service, favour, or any other form of reciprocity. According to D. Nowalska-Kapuścik, time is nowadays a product of high-quality, gaining an economic value [2017, pp. 31-32]. Just as the household production and the aforementioned work of housewives is difficult to estimate and express in monetary units, it is also hard to determine what monetary value should one "time-based currency" have. This and many other economic problems (mainly fiscal) concerning time banks result from difficulties in the qualification of activities which are their basis and have a bottom-up and commercial nature.

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