

LONG-TERM FINANCIAL FORECASTING AS A PART OF STRATEGIC PLANNING IN LOCAL GOVERNMENT UNITS

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Abstract

The aim of this paper is to present, on the example of Karczew municipality, long term financial forecasting as a component of strategic planning and to evaluate it as a tool for managing the socio-economic development in a local self-government unit. The paper has two main parts. In the first part, a theoretical background for strategic and financial management and forecasting is presented and in the second part, a case study of financial forecasting for the Karczew municipality is described. The main conclusion of the paper is that financial forecasting and strategic planning are important tools for the management of the municipal units if these are linked within local present budgeting and are implemented in an integrated way. Analysis of the municipality of Karczew shows that the current integrated strategies create a useful foundation for the effective functioning of the municipal unit.

WIELOLETNIA PROGNOZA FINANSOWA JAKO ELEMENT PLANOWANIA STRATEGICZNEGO W JEDNOSTKACH SAMORZĄDU TERYTORIALNEGO

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Słowa kluczowe: lokalne jednostki samorządu, prognozowanie finansowe, planowanie strategiczne, gmina Karczew.

Abstrakt

Celem pracy jest przedstawienie wieloletniej prognozy finansowej jako elementu planowania strategicznego i dokonanie jej oceny jako narzędzia do zarządzania podstawową jednostką terytorialną, na przykładzie gminy Karczew. Artykuł jest podzielony na dwie główne części. W pierwszej przedstawiono podstawy teoretyczne długofalowego planowania strategicznego i powiązanego z nim planowania finansowego. W części drugiej przedstawiono analizę przypadku gminy Karczew. Główną konkluzją jest stwierdzenie, że długofalowe prognozowanie finansowe jest skutecznym narzędziem zarządzania gminą, jeśli jest zintegrowane z jej strategią rozwoju społeczno-gospodarczego. Przykład gminy Karczew pokazuje, że zintegrowane strategie stanowią użyteczną podstawę efektywnego funkcjonowania tej jednostki samorządowej.

Introduction

The municipality as the primary unit of local government fulfils many functions important for both the local community and the region in which it operates. Development directions and investment activities are subject to planning and are incorporated into local strategies and development policies. The scarcity of resources imposes the necessity of establishing one's own, unique way of hierarchizing the social needs in terms of the importance and urgency of their fulfilment. Formulating a development strategy should serve this purpose which, through an insightful analysis of the past and present situation of the community and the potential for using the available factors, defines the course and sources of its development in the future. The development strategy of the municipality includes the mission and vision of the unit, defines strategic directions and areas of development as well as realisation tasks. All these activities determine the general shape of the municipality in a long-term perspective, which can be made real by formulating a long-term financial perspective. The formulation of a long-term financial perspective must be accompanied by an in-depth understanding of the conditions, resources and factors, which allows for a rational definition of development perspectives. The aim of this paper is to present, on a concrete example from the Karczew municipality, the long-term financial forecasting as a component of strategic planning and to evaluate it as a tool for managing a basic territorial unit. Data collected in survey form from the Karczew municipality constitutes the main empirical material of the study (MARCZAK 2016).

Strategic management and financial management of the municipality

Managing a basic local government unit (LGU), that is a municipality, is a complex issue due to a number of dependencies and links between the activities of the decision-making and executive bodies, between the municipality

and its immediate neighbours, between incomes and spending, etc. It is then worthwhile in the municipality to clearly state the objectives, plan how they will be achieved and think about the benefits resulting from the established objectives. All these elements constitute a development strategy, which in turn may become a document, on the basis of which the long-term financial forecasts will be created (ZIÓŁKOWSKI 2000, p. 60, 61).

In connection with an increase in the demand for public goods, new methods to acquire funds for LGU to deliver them began to arise. However, the municipality, as the basic unit, is not able to satisfy all the needs that are reported by its inhabitants. For this purpose, both decision-making and executive bodies in the municipality seek objective methods to hierarchize their reported needs in terms of their importance and urgency. This allows them to determine which of them must be treated as priority issues. The limitation of resources means that the authorities are able to address only the most urgent needs during the budgetary year, while the remaining ones are planned for the next periods, retaining the predefined hierarchy. Consequently, the allocation of financial resources was no longer sufficient and the management of local government units began to play an increasing role (WYRĘBEK 2010, p. 143). An important component of the management process is strategic management and financial management. The strategic management area of local government units is related to the search for optimal usage of resources and opportunities for a dynamic socio-economic development. Financial management is mainly directed at the rational and efficient usage of available financial resources.

Efficient municipality management depends on adopting a good development strategy, good organisation and efficient operation of the municipality office, good internal and external communication and on the interest and positive involvement of the entities and municipality inhabitants (ZAWICKI et al. 2004, p. 14–22). The model of municipality management is associated with the scope of territorial and functional decentralisation of the country. Within territorial decentralisation, it is possible to distinguish the financial field consisting in distinguishing proprietary budgets and income generated from taxes, fees, income from municipality budget units, income from the estates owned and others (Ustawa z 13 listopada 2003 r. o dochodach jednostek samorządu terytorialnego, Journal of Laws of 2003, no 203, item 1966). Functional decentralisation, also known as budget or asset decentralisation consists in delegating to lower ranks of territorial units the management of specific types of affairs and to allocate funds from the central or regional budget for these purposes. The possibility of raising funds to finance the budget deficit (LUBIŃSKA et al. 2015, p. 317, 318) also plays an important role. In this area, it is crucial to ensure the greatest possible accounting liquidity and flexibility in financial management. The flexibility of the financial management of the municipality consists of three groups of activities: long-term planning, usage of task budgets and civic budgets (POSTUŁA, PERCZYŃSKI 2010, p. 31, 32).

Poland's membership in the European Union, and in particular the possibility of applying for European funds, has contributed to the popularisation of long-term planning. Long-term planning allows for establishing forecasts of the financial result thanks to which a given territorial unit can demonstrate the rationality of application and management of public funds. This planning also provides the opportunity to assess the effectiveness of the selected socio-economic, financial and fiscal policy. The task budget is a relatively new tool for managing public finances, which focuses on results possible to obtain if accompanied by a specific level of available resources. A participatory budget allows the residents of a given territory to express their opinion on the distribution of the part of budget funds. That fact might have an impact on improving the management of available public funds.

In order to avoid acting randomly, a municipality introduces procedure based on planning and strategic management, which generally proceeds through three stages: strategic analysis, strategy planning and implementation of the strategy (WEREWSKA et al. 2012, p. 87–89). Strategic management, however, is not intrinsically sufficient. In order for an entity to fund the realization of the objectives in a chosen strategy, it must also focus on obtaining proper funds (SIERAK 2013, p. 92). This can be ensured by financial management, which includes the following activities: determining the scope of long-term financing possibilities; setting up tasks for funding and measuring any costs necessary for their realization; specifying annual and multiannual plans seen as specific tasks; defining the links between objectives and means intended for the implementation of those objectives; data collection performed in order to monitor and control the development and evaluate the level of their implementation (ZAWICKI et al. 2004, p. 11).

The essence, preparation and implementation of a multiannual financial forecast

Introduction of multiannual development planning and the use of modern financial management forms have become the basis for adopting the policy of obligatory enactment of multiannual financial forecasts. The possibility of applying for European funds and certain commitments arising from the proceedings linked with applying for and using these funds have contributed significantly to this situation. Although the development of a financial forecast generates costs and is not an easy task, benefits arising from the development of such forecasts are acknowledged.

A fundamental condition for developing a good financial forecast is its integral link with a given unit's long-term development strategy. Long-term planning is the process of aligning financial potential and long-term development goals

of a given national region and the entire European community. The time-span of a multiannual financial forecast may vary. In Poland, as well as in some Scandinavian countries, financial forecasts are drawn up for a period of at least one fiscal year and for three consecutive calendar years. In Belgium and in Portugal, the financial forecast covers the entire term of a given unit's council, whereas in New Zealand financial planning covers an entire decade (KACZURAK-KOZAK 2013). A multiannual financial forecast is formed on the one hand by a municipality's development strategy and on the other hand by the actual budget of a given unit for the initial year. Initially, the components of a multiannual financial forecast were defined on the basis of Public Finance – Act PFA (Ustawa z 27 sierpnia 2009 r. o finansach publicznych, Journal of Laws of 2009, no 157, item 1240). Pursuant to this Act, a multiannual financial forecast of LGU should be realistic and should specify at least the following components for each year covered by the forecast: the revenue and expenditure for the current budget of a given unit, asset-related income, budget outcome, the sources applied in order to cover the deficit or objectives the surplus will be allocated to, income and expenditure of the local government budget, including current and planned debts, the size of the debt, as well as the sources of its financing, and the amount of current expenditure and assets.

The above figures must be accompanied by detailed explanations confirming a verifiable situational picture of the given unit. In the case of forecasting debt, it is indispensable to include the full repayment period as well as all planned debts (WALCZAK 2014, p. 3–5). Under the PFA, also the inclusion of the information on ventures undertaken in multiannual financial forecasts, i.e. name and purpose, organizational unit responsible for execution, execution time, total costs incurred, expenditure limits with regard to time periods, and the limit of incurred liabilities, is required. All of these components are obligatorily required and any failure to adhere to them might cause a multiannual financial forecast affected by a local government unit to be considered non-compliant with applicable requirements, and thus a given forecast will not be considered lawful. Currently, while drafting a multi-annual financial forecast, a model adopted by the Minister of Finance by means of a regulation is obligatorily applied (Rozporządzenie Ministra Finansów z 10 stycznia 2013 r.). Long-term financial forecasts should be created carefully and in a rolling manner, which means that the analysis of its implementation should be carried out annually. The forecast should be realistic and yet flexible and should display sensitivity towards forthcoming changes. This is the only way to obtain a reliable illustration of the financial situation in the local government unit and its most realistic reflection in the future. By reliably construing a realistic picture of the future situation in a unit, one may prevent many failures.

In the PFA, we can find information about the requirement of truthfulness, which is to be met by the drafted forecast. Since the obligation to create a forecast by a territorial self-government unit was introduced, controversies amongst

its authors have arisen, being caused by the fact that the obligations incurred by a unit or launched investments force them to prepare forecasts for over a decade. The realism of the forecast consists in the fact that it will be possible to verify its authenticity, by means of checking out a variety of documentation, including the adopted strategy. The Ministry of Finance establishes guidelines for the fulfilment of macroeconomic assumptions by means of basic indicators. Failure of a forecast to comply with universally applicable indicators requires a given unit to provide detailed explanations (*Wskaźniki do oceny sytuacji finansowej* 2014). However, there are also indications that make the execution of multi-annual financial forecasts in a realistic manner questionable. This is due to the fact that the figures included in them are often estimated on the basis of macroeconomic (budgetary) indicators, rather than on the basis of a bottom-up approach. Despite the difficulties arising from the realism imposed on the enacted forecast, it is one of the most important features of this document, without which the forecast would lose credibility.

According to some authors (ARMSTRONG 2001, p. 2–40) a forecast should contain the following elements, also serving as the stages of its creation: establishment of objectives, formulation of issues, identification of sources, collection and preparation of data, selection of a development method, implementation of the method, application of quantitative and qualitative methods, integration of qualitative and quantitative forecasts, analysis of the method's effectiveness, sensitivity assessment, and the presentation of the forecast. Developing a multi-annual financial forecast must be preceded by an appropriate resolution, serving as an act of will and a normative act, which regulates relations between local government units, national institutions and other bodies of public life.

The legal bases of a financial forecast are defined in the Public Finance Act (Ustawa z 27 sierpnia 2009 r. o finansach publicznych, Journal of Laws of 2009, no 157, item 1240), which indicates the need to assess appropriate elements of the resolution, a minimum period taken into consideration, authorities enacting the resolution, relations between the budget and multi-annual financial forecast, methods and deadlines of implementation and the manner of supervision. The Act is supplemented by the Regulation of the Minister of Finance (Rozporządzenie Ministra Finansów z 10 stycznia 2013), which specifies the model of the forecast, the form and deadlines for passing the resolutions and the results of the opinions on the forecast submitted to the Regional Accounting Chamber – RACH. Some elements of the forecast overlap with the unit's budget, but in some aspects it goes beyond the range of the planned budget, making it a more complete and credible document.

Enactment of the municipality's multi-annual financial forecast rests mainly with the legislative body, that is the municipal council, whereas composing the draft resolution falls into duties of the implementing body – the mayor of a municipality, town or a city. The executive body decides whether to only implement changes in the forecast enacted before, or to draft a new project

in the consecutive year. The forecast project is submitted, similarly to the budget project, on November 15 of the year preceding the financial year. By taking into account the planned amount of debt, capability of financing the deficit and an acceptable gauge of liability coverage, the RAC_h issues an opinion serving as a basis for adopting or implementing amendments to the project.

The budget and the multi-annual financial forecast are interrelated in a special way. Often the changes to one of the documents force one to implement changes in the other one as well. It is often the budget that prompts changes to the multi-annual financial forecast, for example due to the failure to execute the budget or the reimbursement of funds from the European Union, which in turn causes a change in the previously forecast amounts. Therefore, it can be said that the current budget is the foundation of a multi-annual financial forecast, since any change in the budget causes a change in the forecast, but not every change in the forecast stipulates a mandatory change in the enacted budget. Compliance with regard to the interrelation between the budget and the forecast should be manifested in two areas. The first one is the compatibility of the adopted data with the budget in relation to the data predicted in the multi-annual financial forecast for a given financial year; the second one is the consistency of the effects and consequences resulting from the adopted budget and the financial forecast (WALCZAK 2014, p. 15). It should be noted that the budgetary inconsistency represents a lesser threat to the territorial entity than the inconsistency in the multi-annual financial forecast, which has long-term economic, social and image implications for the local authorities and communities.

Income and expenditures in the Karczew municipality

Karczew is a municipality situated in Otwock County in the central part of the Masovian Province, in close proximity to Warsaw. The municipality is inhabited by almost 16 thousand people, with around 10 thousand living in the city and 6 thousand in the rural areas surrounding it, forming 16 rural settlements.

Total revenue of the municipality budget per capita in 2015 was 2,728 PLN and total expenditures 2,735 PLN. Karczew has mixed sources of revenue: its own income, general subventions and designated subsidies from the state budget. Proprietary income comes from tax revenues, non-tax revenues and other sources. The level and structure of the municipality income during 2011–2014 is presented in Table 1.

The data contained in the table shows a strong current income ratio (95.8% on average) and steady growth of income, especially for the current income. Asset-related income is declining both in terms of volume and share of the total income (from 6.36% in 2011 to 4.16 in 2014). The level and structure of expenditures in Karczew municipality in 2011–2014 is presented in the Table 2.

Table 1

The income structure of Karczew municipality during 2011–2014 in thousand PLN

Specification	Year			
	2011	2012	2013	2014
Total revenue	39,534	40,428	41,995	43,606
Asset-related income	2,516	1,331	1,298	1,696
Subsidies and funds for investments	1,485	1,065	874	591
Income from the sale of property	1,000	237	372	1,075
Income from the conversion of perpetual usufruct rights in ownership rights	31	29	52	29
Current income	37,018	39,097	40,697	41,910
General subsidy	7,331	7,736	7,808	8,114
Complement to the general subsidy	x	43	x	x
Designated subsidies	4,893	5,057	5,498	5,497
Revenues from taxes and fees	11,793	11,595	12,533	12,902
Shares of taxes constituting the revenue to the state budget	10,582	11,440	12,551	14,147
Income from property	522	630	542	541
Other current revenues	1,897	2,597	1,765	709

Source: author's own elaboration based on: Karczew municipality financial statements for 2011, 2012, 2013, 2014.

In the structure of expenditures, the current expenditure also dominates, although the share of asset expenditure in the total sum of expenditures is higher than the share of asset-related income in the total amount of income. A particularly high level of asset expenditure was noted in 2012, when substantial funds were invested in road network repair and development. The current expenditure is relatively stable with a slight upward trend. More than half of the current expenditure consists of salaries and remuneration derivatives in the public sector.

An important element in the municipality's finances is the state of receivables and liabilities. A significant part of the municipality's receivables are deposits in bank accounts, cash in hand, receivables due, term deposits, receivables on the basis of guarantees provided and other receivables. On the liabilities side, the most common component is personnel remuneration and additional annual remuneration, insurance premiums, contributions to the labour fund, purchase of energy, materials and services, and investment expenditure. The liabilities of the municipality during the years 2011–2014 increased more than fourfold. It stems in particular from implementing investments and purchase of energy.

Table 2

The structure of expenditures of Karczew municipality in 2011–2014 in thousand PLN

Specification	Year			
	2011	2012	2013	2014
Total expenditure	39,047	47,148	45,832	43,704
Asset expenditure	4,273	9,502	7,749	5,664
Agriculture and hunting	226	458	x	x
Production and provision of electricity, gas and water	15	355	97	6
Transport and communications	455	6,063	331	256
Tourism	x	x	x	719
Housing management	123	122	407	11
Public administration	571	913	616	201
Public safety and fire protection	479	87	161	x
Education and upbringing	725	153	3,632	1,643
Health care	4	102	1,703	1,982
Municipal services management and environmental protection	529	820	784	694
Culture and protection of national heritage	x	12	x	7, 13
Physical culture	1,147	416	19	152
Current expenditure	34,774	37,647	38,082	38,041
Expenditure on debt servicing and payments due to the provision of guarantees	661	620	1,016	870
Other expenses	34,113	37,027	37,066	37,170

Source: author's own elaboration based on: the financial statements of Karczew municipality for years: 2011, 2012, 2013, 2014.

The development strategy of Karczew municipality as the basis of the multi-annual financial forecast

The overall picture of the development strategy of Karczew municipality consists of socioeconomic diagnosis, SWOT analysis, mission, vision, strategic goals and tasks, as well as the monitoring system and evaluation of the strategy. The socio-economic diagnosis includes basic information about the municipality, it shows the socio-economic, environmental and organizational and institutional profile. The whole picture is an approximation of the conditions of the municipality on its various levels, which is the basis for the further formulation of the strategy. In the later stage, the mission, vision, objectives, strategic areas and implementation tasks were defined to direct the activities of the municipality. At the final stage, the unit systematically checks to what extent the actions

taken are cost effective and whether the same effects can be achieved with a lower input of human and financial resources.

The basic assumption when developing the development strategy is to base it on the concept of sustainable development and considerations for the close vicinity of the capital city of Warsaw. Of key importance is also the location of the municipality in the Vistula river valley and highlighting the Warsaw-Otwork forest, the urbanised Otwork zone and agricultural production areas in its spatial structure. The municipality is dominated by agricultural lands, whose share in the area reaches 90%. Forests constitute 6% and the remaining terrain types cover 4% of the area. There were 1,576 economic entities registered in the municipality, of which 12 can be classified as large ones and represent pharmaceutical, meat and packaging industries. Among the population of the municipality numbering 16 thousand, women hold a slight numerical advantage.

While determining the organisational and institutional profile, attention should be paid to the diversity of the municipality area with separate considerations for towns and rural areas. Table 3 shows the functions assigned to the town and rural areas; this division takes account of retaining hierarchy of functions from the most important to the least important. Some features apply to both urban and rural areas.

Table 3

Functions of the town and rural areas of Karczew

Town	Rural areas
Production function	agricultural function
Housing function	housing function
Service function	service function
Technical support function	the function that includes other aspects of the service activities
Agricultural function	recreational and tourist function

Source: author's own elaboration based on: *Strategia...*, online, p. 32, 33.

In the town, production functions have the greatest importance, covering the range of local industry and small-scale production, as do the housing and service functions in the field of services for residents and manufacturers and the technical support of densely populated areas. A small role in the city is also played by the agricultural function. In the case of rural areas, the following functions were distinguished: agricultural, the most important one in view of the favourable natural conditions, housing and service of a similar extent as in the city. Less important is the function covering other aspects of the service activities linked for example with agritourism and tourism and recreation.

Karczew municipality takes into account the following tasks in its mission (*Strategy...*, online, p. 35–49): establishing a local economic development centre;

development of entrepreneurship; development of tourism; development of education; the maximum use of geographic potential; as well as the development of social and economic opportunities. The above elements contribute to the municipality's launch of long-term ventures, which serve as the basis for economic and social activities of local authorities, as well as actions promoting the municipality in Poland and abroad. The formulation of the mission is supposed to lead the municipality to acquire the expected image in which the municipality of Karczew distinguishes such features as security, modernity, investment promotion, local culture promotion, recreational attractiveness, serving residents in everyday life. The achievement of these features by the municipality is expected to bring about an influx of inhabitants and investors and foster further dynamic development, allowing Karczew municipality to adapt the local pace and way of life and development to the requirements posed by its location in the vicinity of Warsaw.

Karczew municipality, formulating the mission and vision, has set the direction of development in four strategic areas, including specific goals that the municipality will strive to attain in the near future, and which in fact will lead to the realisation of a specific vision (Fig. 1).

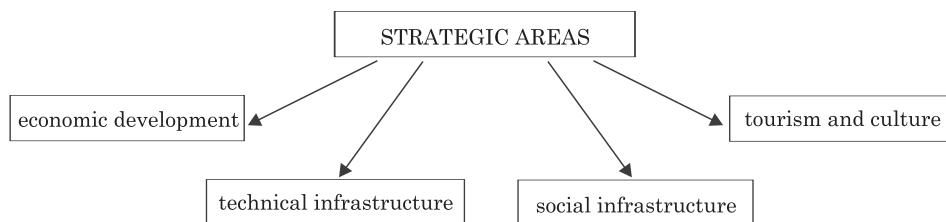


Fig. 1. Strategic areas of Karczew municipality
 Source: author's own elaboration based on: *Strategia...*, online, p. 49, 50.

Each of these areas contains a specific set of features. Economic development: creating favourable conditions for investments and expanding local entrepreneurship, attracting new investors, working with local communities for the sake of economic development, maximising the potential of the location and the environment. Technical infrastructure: development of communication in the local range and beyond the municipality borders, establishment of information society, development of the environment, improvement of waste management and water and sewage management. Social infrastructure: improving the living standard of the local population, improving the local labour market, reducing the migration of its inhabitants, boosting economic aspirations of residents, revitalising the housing situation. Tourism and culture: revitalisation of the tourism sector and development of infrastructure, turning the municipality

into a kind of leisure centre, which would attract weekend visitors from Warsaw and from the vicinity, development of gastronomy and accommodation as well as sport and leisure facilities, and cultural development.

The next step in building a strategy for sustainable development in the municipality of Karczew consists of assigning, to each strategic area, implementation tasks, which are a list of key tasks for the implementation of the development strategy (Tab. 4).

Summing up all the tasks selected by the municipality, the main goals are: improving the living conditions of the inhabitants, attracting new investors, creating favourable living conditions for the disabled, taking care of the natural

Table 4

Implementation tasks of the municipality of Karczew

Economic development	Technical infrastructure	Social infrastructure	Tourism and culture
Creating a development plan	improving the condition of local roads	building strategies of social problem solving	improving hotel and gastronomy facilities
Creating the planning documentation	creation of public transport between the municipality and Warsaw	supporting non-government organisations for public welfare	purification and adaptation of water reservoirs
Providing utility infrastructure	improving the condition of bicycle paths	building new nursery schools and kindergartens	using the potential of the local vegetation
Consolidation of dispersed land ownership	creating broadband Internet access	providing better education and development for the inhabitants	building new pavements and bicycle paths
Construction of convenient means of transport between Karczew and Warsaw	improving the municipal waste disposal system	supporting childcare facilities	adaptation of fishing sites
Implementing provisions of tax relief for entrepreneurs	developing the water and sewage system	creating new social economy entities	improving the programme of cultural and promotional events
Popularisation of farming	improving the flood control system	renovating the sport leisure and cultural facilities	implementation of the Monument Care Programme
Using the renewable energy sources	–	improving the cultural offer of the municipality	building a conference centre
Attracting the green business investors	–	improving housing construction	creating a tourist information point
Creating logistics infrastructure	–	support for the disabled and handicapped persons	–

Source: author's own elaboration based on: *Strategia...*, online, p. 49–60.

environment, and opening up to the development of tourism. The directions of activities in the municipality are a result of specifying all the tasks with considerations for each area of activity. They are the main point of the strategy indicating the path that the municipality is supposed to follow in the near future.

Assessment of the municipality's financial situation

The assessment of the municipality's financial situation can be carried out based on the following rates: share of operating surplus in the total income, share of asset-related expenditure in total expenditure, share of operating surplus in asset-related expenditure, operating surplus per capita, share of liabilities in the total income, and total debt ratio (*Wskaźniki do oceny sytuacji finansowej* 2014, p. 6, 7).

The share of operating surplus in total income in the years 2012–2014 increased from 3.6% in 2012, through 6.2% in 2013, to 8.9% in 2014. Such an upward trend is promising for industry and investment. Nevertheless, the asset-related expenditure rate in total expenditure shows a downward trend. In the years 2012–2014, these rates decreased from 20.2% to 13.0%. This means that the municipality is allocating a decreasing share of its expenditure to investments. The operating surplus per capita steadily increased from 90.4 PLN in 2012 to 163.2 PLN in 2013 and 242.7 PLN in 2014. This demonstrates a rational and successful development of the unit. Despite a considerable debt growth, which reached 17.8% of total revenue in 2014, the share of liabilities is many times lower than the maximum allowable debt, set at 60% of the income (rates for 2014 assessments). In the years 2012–2013, the share of liabilities in total income did not exceed 4%. The total debt ratio was 1.5% in 2012, 2.4% in 2013 and 2.0% in 2014. Therefore, the debt service was not a significant financial burden for the municipal budget.

Forecast and the actual financial situation of the municipality

The long-term financial forecast in the municipality of Karczew, due to its financial commitments, spreads over a period of 15 years from 2012 to 2026. The extrapolation method of statistical series linked with the long-term development strategy was used. This is a result of the requirement that imposes on units the obligation to spread the forecast over a period necessary to repay public debt. The analysis of the discrepancy between the forecast and the actual situation will be based on its selected elements: total income, asset-related income, current income, total expenditure, asset-related expenditure, current

expenditure, operating surplus, amount of debt, and debt service expenditure. These discrepancies are often a result of unexpected external factors related to the changes at the national level and to the influence of the immediate environment on the municipality.

The long-term financial forecast conducted by the municipality of Karczew contains detailed analyses of given elements that take into account anticipated changes resulting from complex draft resolutions, a change of the economic situation in the country, economic outlook and its impact on the situation of the municipality. The community forecasts current revenues by adding tax revenues as part of the state budget, revenues from budgetary units, general subventions, targeted state subventions, operating programs, and taxes and fees. In turn, the forecast of asset-related income is income from the sale of property and other asset-related income.

Figure 2, representing the forecasted total revenue and total expenditure, at the beginning of the forecast period shows a significant preponderance of revenue over expenditure. This difference is due to the significant investments in infrastructure. Between 2014–2016 revenue and expenditure reaches similar values of approximately 43–45 million. In the years to come, there is a noticeable upward tendency for both parameters while preserving the overall income advantage over total expenditure.

The forecasted operating surplus stems from the advantage of planned revenues over current expenditure and indicates systematic growth. The debt service of the municipality is paid from the operating surplus, and the forecast includes a time necessary to repay the debt. Over time, it may turn out that there will be an increase in debt repayment in the municipality, thus the projected surplus may be lower. Table 5 shows the ratio of forecasts to actual figures for income and expenditure.

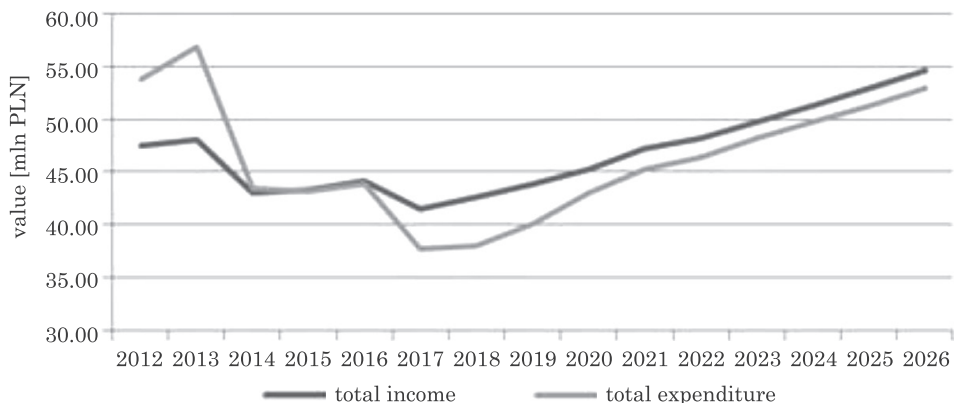


Fig. 2. Forecast of total income and total expenditure for 2012–2026 in mln PLN

Source: author's own elaboration based on: *Multi-annual Financial Forecast of the Karczew community for years 2012–2026*.

Both in the case of asset-related income and asset-related expenditures, the forecast turns out to be of little accuracy. The real value in relation to the forecasted value in the case of asset-related income is only 17.4%, and in the case of property expenditure is 55.2%. Thus, there has been a considerable overestimation of the forecast. The other categories turn out to be much better. The average share of the real state to be projected in total income is 91.3% and in total expenditure 89.7%. The average share of this indicator for current income is 110.2% and for current expenses 105.2%. Definitely the largest divergence

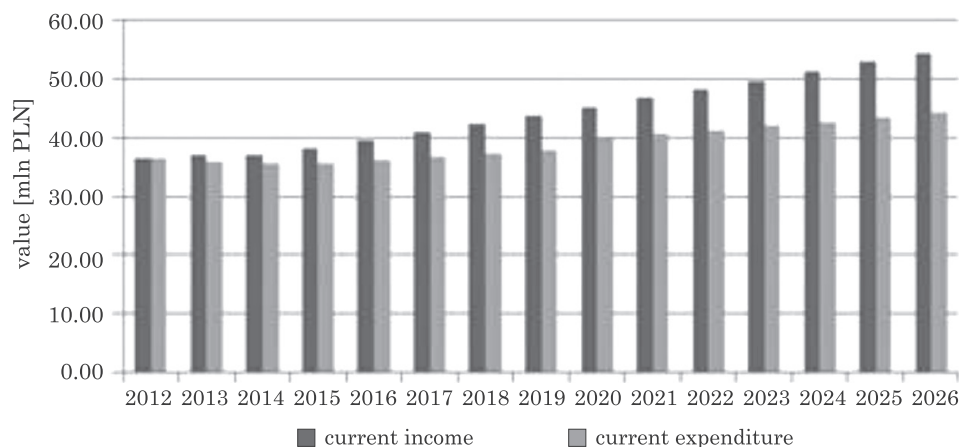


Fig. 3. Forecast of operating surplus for the period 2012–2026

Source: author’s own elaboration based on: *Multi-annual Financial Forecast of the Karczew municipality for years 2012–2026*.

Table 5

Forecasted and real levels of incomes and expenditures in thousand PLN

Revenues and expenditures	2012		2013		2014	
	forecast	real	forecast	real	forecast	real
Total revenue	47,442	40,428	48,061	41,995	43,022	43,606
Asset-related income	11,020	1,331	11,015	1,298	6,016	1,696
Current income	36,422	39,097	37,045	40,697	37,006	41,910
Total expenditure	53,734	47,148	56,800	45,832	43,439	43,712
Asset-related expenditures	17,312	9,501	20,741	7,749	7,748	5,671
Current expenditure	36,422	37,647	36,059	38,082	35,691	38,041
Operating surplus	0.00	1,451	986	2,615	1,315	3,869

Source: author’s own elaboration based on: *Long-term financial forecast for the Karczew municipality for the years 2012–2026 from 28 December 2011 and Financial Statements for 2012, 2013 and 2014*.

between the actual and predicted values was observed for operating surplus, which was underestimated by almost 280%. By balancing values for total revenue and expenditure, it can be said that the forecast is most reflected in reality.

The municipality is planning to pay off the current debt by 2026, with the repayment of a larger portion planned for 2012–2019. WIBOR, which reached a value of 4.75 at the beginning of 2011, is of great importance for debt servicing, and its further development is related to a boom that is expected to improve. The forecasted debt amounts to a maximum of more than 25 million PLN in 2013 and will fluctuate around that amount until 2016. In the coming years, a continuous decrease in this amount is planned. On the other hand, the cost of servicing public debt reached its highest value in 2014.

Table 6

Statement of the debt forecast with real state 2012–2014, thousand PLN

Debt	2012		2013		2014	
	forecast	real	forecast	real	forecast	real
Total debt	17,186	19,73	25,553	22,448	25,543	21,830
Public debt service	707	620	99	1,016	1,290	870
Percentage of debt repaid [%]	3.95	3.01	3.72	4.33	4.81	3.83

Source: author's own elaboration based on: *Long-term financial forecast of Karczew municipality for the years 2012–2026* from 28 December 2011 and Financial Statements of 2012, 2013 and 2014.

The data in table 6 shows that the reality is rather different than the forecast. That is why there is a need to verify the correctness of the forecast. Observations of the extent of the forecast is reflected in reality during the three years: 2012, 2013 and 2014. It turned out that in each of the analysed years the forecasts were revalued – by 81%, 99% and 30%, respectively. A rather large error in the first two years of forecasts was due to the significant revaluation of asset-related income. The municipality planned to sell part of the property, but did not find the right investor. It can be expected that in the following years the forecast done in Karczew municipality will be closer to real values.

To determine whether the annual financial forecast made by the municipality is reliable and useful in three financial years 2012–2014, the relationship between the current income and current expenditures permits the reduction of the debt.

Comparing the current income level together with proceeds from the sale of assets for the years 2012–2014 with current expenditure in these years, shows the growing surplus from 2,526 ths PLN in 2012 to 4,106 ths PLN in 2014. The surplus can be used for repayment of the debt. The coefficient resulted from comparing this surplus with total revenue over a three year period was 0.076, and it increased from 0.062 in 2012 to 0.094 in 2014.

A comparison of this indicator to the indicator calculated from the ratio between the expenses associated with public debt and budgetary revenues, confirms, the soundness of the forecasting process.

The dependence of calculated indicators testifies to the correctness of the forecast and to the fact that if the municipality of Karczew in subsequent years obtains indicators similar to those covered by the calculation, in proportion to the period which will be subject to the calculation of the maximum amount of instalments per year, to repay the financial year in question, in accordance with the rules of the Act on public finances, the municipality should not have future problems with the budget and the debt repayment in subsequent years. This indicates the rationality of credits and liabilities taken in the municipality and to its solvency. To make this actually happen, the measures taken by the municipality must be characterised by effectiveness, efficiency, utility and sustainability. Therefore, the implementation of the development strategy of the municipality should be confronted with financial forecasts through the use of periodic evaluation. The currently implemented strategy is valid only from 2012 and only three years have been evaluated. Therefore, the implementation of both the development strategy and the financial forecast should be monitored and confronted constantly.

Conclusions

Forecasting and strategic management is a useful tool to shape the development of the local government units. Accuracy and effectiveness of strategic management can be enhanced by developing, in addition to a long-term development strategy, a multi-year financial forecast. In this way, you can assemble and link the long-term development goals to the territorial together with its financial potential. This combination of the two types of strategic planning with the realistic budget of the unit from the initial year provides the opportunity for greater effectiveness of forecasting. Realistic financial forecasting linked to macroeconomic indicators by means of periodic evaluation and updating of long-term development programming can become a useful tool in the discretion of local government and the Board of Directors of each municipality.

On the basis of the analysis of the indicators of the financial situation of the municipality of Karczew, it can be concluded that the current strategy is the foundation for the effective functioning of the unit. The municipality develops dynamically while maintaining a financial balance. The initially formulated multi-annual financial forecast was significantly overestimated because of the mismatched revenue from the sale of assets, but over time, the forecast has become credible. The required relation between the obtained relationship in terms of the amount of the debt, the interest and the income budget for

the next three years, fared successfully. One can therefore conclude that at the maximum usage of resources and capabilities, a municipality can implement a development strategy successfully.

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