

## STUDY ON THE FOOD VOUCHERS MARKET IN BULGARIA

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### Abstract

*This Study gives a macroeconomic, socioeconomic and fiscal evaluation of the potential liberalization of the food voucher system in Bulgaria. It takes into account the developments in the country after 2012, notably the dynamics of the household income, wages and labor market and updates the justification for liberalization of the system. It assesses and analyses the direct and indirect benefits and costs of the system's operation in its present form, from the perspective of both government budget as well as the economy and household budgets. For better accuracy and comprehensiveness of the analysis, it also takes into consideration the impact of food vouchers on the informal economy, the value added generated in the domestic economy and intra-family redistribution.*

*The study outlines three sets of reasons – economic, fiscal and social-political - why we can expect positive developments if monthly voucher allowance is increased and the quota principle is replaced by market-based use of the system.*

On the macroeconomic side, the growth of wages and productivity resulted in decrease of the value of the monthly allowance of the vouchers (BGN 60) since the system was introduced in 2007. The devaluation is about 3 times, inflation is not the key factor but the developments in wage income, minimum wages, employment and productivity.

The use of FV is associated with higher productivity, improved diet and consumption, while food expenditure as a share of household budget declines. This leads to **positive effects on the fiscal side.**

**Indirect effects resulting from increased corporate and households' disposable income, and expected job creation effects that liberalization is likely to produce offset the direct shortfall of budget revenues.** Depending on the scenario that will eventually materialize, the probable indirect effects are the following for the first three years:

- The number of **new jobs created connected to food voucher consumption vary from 1,679 to 2,068;**
- The direct budget revenue shortfall will most likely be compensated by **indirect (non-VAT) fiscal proceeds from income tax and social contributions, of an amount between BGN 11 and 15.7 mln.** Additional positive development would materialize from household income allocation to non-food consumption.

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**Socio-political grounds for liberalization** are associated with improved household budget structure and gains from improved social policy efficiency on enterprise and country political level.

Previous studies show that almost 85%<sup>2</sup> of companies increase the salaries with the cost of the vouchers competing for qualified labor and most of them consider FV as an essential part of their corporate social responsibility policy<sup>3</sup>.

According to the study of the International Labor Organization, Food at Work<sup>4</sup>, the food voucher system benefits employees, companies and governments alike by increasing purchasing power, improving health and working conditions, enhancing productivity and reducing the informal economy. Out of 19 EU member states who have implemented some form of social voucher system, Bulgaria remains the only country in the EU with FV system based on the quota principle. The following study looks at different scenarios for market liberalization of the system following the steps of all other countries that have implemented a food vouchers social policy and assesses the impact of such liberalization on the state and the users of food vouchers.

*Assessments in the report use conservative assumptions on initial values of parameters. The key source here is the social and economic analyses of food vouchers and the (latest) field surveys of the system conducted by KS2 Ltd and Industry Watch in 2010 and 2012.*

## **Arguments in Favour of Liberalization of the Quota Principle**

### ***Historical justification***

From all 42 countries in the world with existing social voucher system, only in Bulgaria allocated annual quotas limit the use of food vouchers. When the country introduced food vouchers **in 2003, the overall socioeconomic situation was very different from today**. Back in 2003, and ever since 2003, the Ministry of Finance or the legislators did not undertake any detailed impact assessment or justification of the quota principle. However, the general economic reasoning is applicable and validates both the cautious approach to the innovation of 2003 and the reasons to put an end to the use of this principle in 2018.

### **Fiscal background**

**On the fiscal side**,<sup>5</sup> any tax preference in 2003 would have been risky in terms government (foreign) debt management. The following chart gives the dynamics since the beginning of this century to 2017.

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<sup>2</sup> The Use of Food Vouchers in Bulgaria: A Field Survey Report

<sup>3</sup> FV A/B/C National Scale Survey, B2B Trade Nets, June – August 2017

<sup>4</sup> Wanjek, C., Food at work: workplaces solutions for malnutrition, obesity and chronic diseases, Geneva, International Labour Office, 2005

<sup>5</sup> On the situation with the government debt in 2003, see: Ministry of Finance, Government debt Management, Sofia, September 2003, pp. 38-42.

**Chart 1: Overall fiscal situation: government debt**

**The consolidated government debt in 2003 was 55.8% (down from 77.6% in 1999),** of which the foreign debt was 49.1% of GDP. The situation in 2018 is significantly better: in May 2017, the debt was at the level of 27.1% of GDP, **in May 2018 – 22.6%.**

On the government spending side, the dynamics is also positive: government expenditure in 2017 were 35.2% of GDP, while their average level in the last 22 years was 37.7% of GDP.

**Socioeconomic developments<sup>6</sup>**

**In 2003,** according NSI data and reports by the Ministry of Labor and Social Policy, **the unemployment rate was almost 18%, in 2018, it is three times lower - 5.7%** (while employment rate improved from 40% to 52% for the period, and is the highest in the last 20 years).

**Chart 2: Unemployment dynamics: 2008-2018<sup>7</sup>**

FV typically have positive impacts on junior employees, not at least because they are new entrants to the labor market, start from relative low wage level, close to the minimum wage, and because vouchers increase social mobility.

<sup>6</sup> All data on employment and wages is available from NSI and EUROSTAT in somewhat more condensed form.

<sup>7</sup> All graphs from Trading Economics use latest NSI data.

For the last 17 years, the dynamics of youth unemployment was uneven, but it decreased since 2013, from 28.7% of the total unemployment to 10.5% in August 2018, while its all times peak rate (in 2001) was 38.6%.

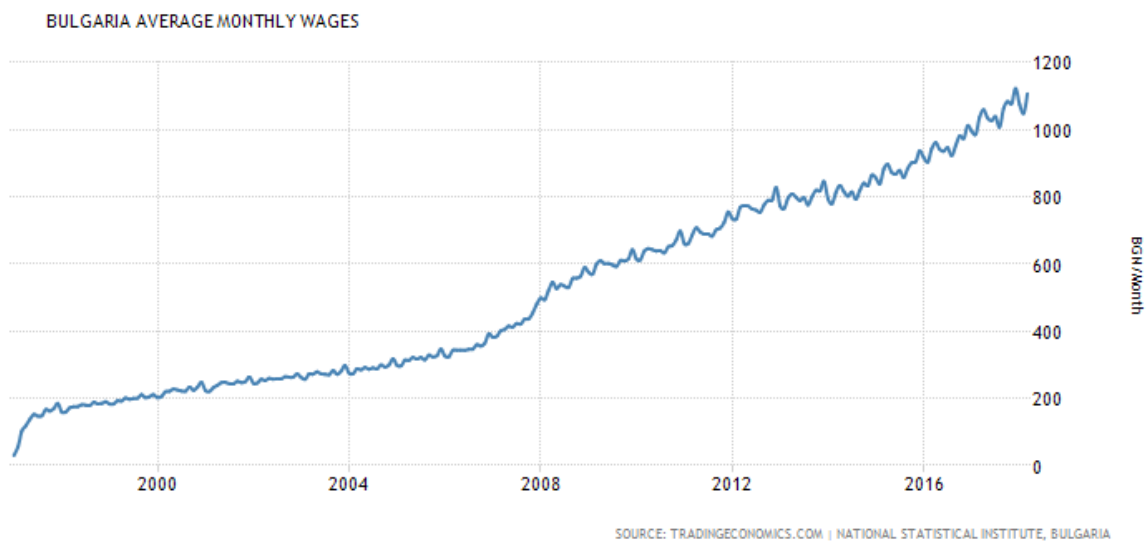
**Chart 3: Youth unemployment in Bulgaria: 2000-2018**



Socioeconomic conditions of the FV also developed in a direction that allows for liberalization of the system without negative side effect for the state budget.positive direction.

- At the time of its introduction, the monthly FV allowance represented 13.9% of the average monthly salary and 15% of the average monthly insurance income; in April 2018 it stood at 5.8% of the monthly wage and at 6.7% of the insurance threshold; the improvement is 2.4 and 2.2 times respectively. The comparison for a twenty-year period finds that the BGN 60 monthly allowance was equal to the average monthly salary of 1997.

**Chart 4: Twenty-year increase of the average monthly wages**



- When the introduction of the system, the monthly FV allowance was conditional to the amount of the minimum wage (MW), and fixed at a three times lower threshold, or the allowance was 33.3% of the MW in 2007.
- In 2018, it is 11.2%; almost three times less. The following Graph shows the dynamics of the MW. Since 1999, the minimum monthly wage had grown by 870%.

**Chart 5: Minimum monthly wage dynamics (2008-2018)**



The unit labor costs index increased from 75 in 2007 to 153 points in 2017 while productivity went up from 80 to 137 index points for the period.

All these factors led to an overall decline of the real value of the food vouchers, which leads to diminished effects of their use as a type of a social policy.

In 2003, presumably, there could have been a concern about the risks to the overall tax collection from households, since **the food expenditure per person stood at 40.4% of the household expenditures**.<sup>8</sup> This led to the assumption that, due to the high food and beverages share in family budget, larger than BGN 60 tax allowance will diminish VAT and other revenues to the state budget. This assumption was not justified: food share in the household expense went down, social mobility (poverty dynamics, etc.) improves, and the budget revenue increases due to overall economic performance since 2011.

After 2015, the households' food expenditure, relative to non-food goods, is not the lead item in household payments. Even eight years ago, in 2010, the spending on food per person was relatively high – 37.2%, in 2017 it was 30.1%, this year it is likely to go further down to about 29.5% of household expenditures per person. In the meantime, mirroring the growth of the family income, household expenditures increased by 62.8% for the period, while **the VAT revenue from food purchased by households went up by 29%** (according to our estimate).

**Simultaneously, food consumption also increases:** in 2016, compared to 2010, Bulgarian households could buy larger quantities of all basic food products; the highest is the growth of pork (51%), eggs (43%) and rice (42%), and the smallest - feta cheese (21%), milk butter (12%) and yellow cheese (8%).<sup>9</sup>

Liberalized FV system is likely to increase social mobility and quality of the diet for the lowest income strata of the population: due to low education levels, job opportunities for this stratum are limited to low-skill job openings and close to MW monthly income. This is the most socially

<sup>8</sup> All data used in this paragraph is from NSI regular Households Surveys.

<sup>9</sup> <https://www.infograf.bg/article/1492600326000>

stagnating social group, which comprises 60% of those at poverty risk (below 60% of the median household income), with poorest quality of the diet.<sup>10</sup>

### **Previous findings and the Romanian experience**

In 2012, a special field survey of the system proved that provisional concerns that the food vouchers would be used by employers to economize on wage costs were not justified: almost 85% of the companies, in fact, increased the salaries with the cost of the vouchers (competing for qualified labor). As the above data on employment suggests, such concerns in 2018 are completely unjustified as unemployment is at all times low and companies are competing for ever less available talent.

Since 2003, the liberalization of the system was discussed at least four times, each time the reform was supported by detailed impact studies that articulated the above and other arguments (benefits related to shrinking-shadow-economy effect, advantages vis-a-vis other social policies, minimum and/or average wage ratios, ratio to annual “fiscal losses” as assessed by the ministry of finance, etc.)

In 2004, out of 19 EU countries using food vouchers only Bulgaria and Romania still applied the allocation of quotas.

The experience shows that, in Bulgaria, quotas regularly exhaust by September- October each year. Presumably, similar developments along with concerns that the benefits of the system (for the state budget, income growth and market transparency) remain unutilized, while admin costs of running the quota-based system increase inefficiencies, motivated Romania to abandon the quotas in 2004. The reform was justified by a macroeconomic and fiscal impact survey that applied the same reasoning as in the Bulgarian discussions.<sup>11</sup>

Two years after cancelling the quota, a comparative study by Accase found that “meal vouchers are the main benefit Romanian workers get” and that the original modest and, then, more substantial increases of the value of the vouchers (approximately by 30%, since 2017) have had no negative fiscal impacts.<sup>12</sup>

### ***Net shortfalls and benefits for government revenue (scenarios)***

If the total quota is liberalized, and assuming that the use of food vouchers increases by respectively 30%, 10% and 10% annually in the next three years, the **shortfall for the budget will be relatively insignificant.**

As it is demonstrated in the below calculation of effect of different scenarios, here we shall mention the following effects. In the ‘zero’ year scenario with an increase of the total quota from BGN 280 to BGN 340 mln, the shortfall for the state budget will vary from BGN 26.5 mln in the ‘zero’ year, through BGN 34.5 mln in the first year of liberalization (30% increase) to BGN 38 mln in the second year after the liberalization.

This budget revenue shortfall is calculated on gross basis, and is significantly lower than the total amount of losses from tax breaks on various items, according to the methodology of the Ministry of Finance.

Calculated on net basis, i.e. taking into consideration the effects on the shadow economy (with an assumption of 10% and/or 15% reduction<sup>13</sup>) and additional value added that is generated in the domestic economy (BGN 0.20-0.25 per each Lev), budget shortfall will be even more insignificant.

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<sup>10</sup> See details: <https://ime.bg/>

<sup>11</sup> See: *Macroeconomic Impact of the Prospective Increase of the Nominal Value of Meal Vouchers in Romania*, Bucharest, Geastrategy & Consulting, 2013.

<sup>12</sup> See: [Benefits granted by Romanian employers compared to practices in the region](#), Bucharest, Accase, 2015, pp.: 8-14, and, for the latest developments:

<sup>13</sup> *The Use of Food Vouchers in Bulgaria: A Field Survey Report*, KC2 Ltd, 2012.

For example, under the ‘zero’ year scenario the increase of the total quota will amount to BGN 60 mln compared to 2017. This will mean that the relevant additional VAT revenues should reduce gross shortfalls. Because of additional domestic value added, they would be BGN 2–2.5 mln, and thanks to bringing into the light the respective turnover in the economy by 10% – BGN 1 mln or BGN 1.5 mln in case of 15% reduction of the shadow economy. The expected higher consumption and family income redistribution, amounts to an additional revenue of BGN 2.6 mln.<sup>14</sup>

As the shortfall results from increased companies and households’ disposable income, the expectations of job creation resulting from the reform are likely to increase the fiscal benefits. The number of jobs vary from 1,679 to 2,068 for the period. The associated fiscal proceeds from income tax and social contributions vary between BGN 11 and 15.7 mln within three years period.

Taking into account direct and indirect budget paybacks from job creation, increasing the disposable income of households, bringing shadow economy into the light and the generated additional value added, the net effect of the reform is actually positive. Depending on the scenario considered, it varies from **BGN 13 to 22 mln per annum within three years.**

### **Historical basis of liberalization**

The average annual increase in the total quota was little more than 4% in the period 2009-2017, amounting to 41% for the whole period. **No negative effects were registered so far. The loss of revenue for these years due to use of food vouchers was less than or around 1% of the corporate tax revenue.**

### **Economic trends and dynamics**

The unit daily value of food vouchers in the country is relatively low – BGN 2.7 per business day and less than BGN 2 per calendar day. This value of **food vouchers is at the level of the World Bank’s absolute poverty line measure**<sup>15</sup>. This amount and the dynamics of household incomes since 2004 gives grounds to assume with greater probability that, **first, the saturation of the demand for vouchers will be a relatively quick process and second, it will help reduce the poverty level.**

This is due to the **relatively high share of food expenditures in household budgets in Bulgaria** – around 30%. The fact that the introduction of a social policy system using food vouchers coincided with the tax reforms towards reducing and simplifying direct taxes, does not reduce the benefits and incentives of using vouchers, both for the government budget and for the companies and beneficiaries. This is so because:

- The growth of the disposable income of households results in an increase in absolute terms of food expenditures in household budgets; these amounts (if vouchers are used) increase the registered turnover and indirect tax revenues;**
- Companies have only a partial incentive for tax optimization: what is important for them is competition, i.e. optimization of unit labour cost (including the so-called social taxes, which become difficult to estimate in the medium-term) and providing additional (compared to their competitors) benefits for their employees.**

The liberalization of the system will not result in substitution of food vouchers for salary income. This is so, as:

- vouchers constitute a relatively small share of labour costs of companies and are**

<sup>14</sup> See for details below the paragraph on Reduction of the shadow economy.

<sup>15</sup> Global Poverty Line Update, FAQ, World Bank Website:

<http://www.worldbank.org/en/topic/poverty/brief/global-poverty-line-faq>. In 2011, the share of Bulgarian population living under USD 1.9 per day was 2%, see: List of countries by percentage of population living in poverty, Wikipedia: [https://en.wikipedia.org/wiki/List\\_of\\_countries\\_by\\_percentage\\_of\\_population\\_living\\_in\\_poverty](https://en.wikipedia.org/wiki/List_of_countries_by_percentage_of_population_living_in_poverty) .

- used in combination with other social benefits;
- as mentioned above, there is a general **downward trend of food expenditures as a share of household incomes**, and as a share of total household expenditures;
  - the household expenditures on other items have an effect of replacing food expenditures with savings, healthcare, education, leisure, travel, etc.; i.e. there is another positive spill-over effect of food vouchers<sup>16</sup>;
  - This is not a trivial effect in the medium term: together with the drop in food consumption as a share of household budgets, **non-food consumption increases**, as mentioned above by almost 63% for the last seven years;
  - Simultaneously, as already mentioned the **purchasing power of households for most food products also increases** in 2016, compared to 2010.<sup>17</sup>

## Regulation of the Food Voucher System in Bulgaria

### *Legal Framework*

The use of food vouchers regulated by the Corporate Income Tax Act (CITA), Income Taxation of Natural Persons Act (ITNPA) and Ordinance No.7 of 9 July 2003 on the Conditions and Procedures of Issuance and Withdrawal of Authorizations for Operating as Food Voucher Operator and Carrying out Activities as Operator. Pursuant to Art. 209, paragraph 1 of CITA, no tax shall be due on the social expenses amounting to up to BGN 60 per month, provided in the form of food vouchers for each employed person, if several conditions are met. The person's negotiated basic monthly remuneration for the month, in which a voucher is provided, is not lower than the person's average negotiated monthly basic remuneration for the preceding three months. Operators authorized by the Minister of Finance provide the vouchers.

Pursuant to Art. 24, paragraph 2 of ITNPA, the taxable income of natural persons does not include food vouchers received within the amount of 60 BGN and under the procedure of CITA. In addition, no social security contributions are due on this amount.

Pursuant to Art. 12, paragraph 1 of Ordinance No.7, the total annual quota for issuance of food vouchers is approved in the State Budget of the Republic of Bulgaria Act for the relevant year. Pursuant to paragraph 2, the Minister of Finance determines the amount of the individual quota and the total number of individual quotas for the relevant year. The procedure of granting individual quotas allows for reporting on demand and supply of vouchers, and enables control on transactions implementing individual quotas.

The social vouchers system exists in 42 countries worldwide, including 19 EU member states. In general, social vouchers are instrument to implement social policies at local level, according to a specific context and national objectives often leading to a combination of tax and/or social security preferences that are limited to some monthly/daily amount. Except for Bulgaria, total quota limitation existed only in Romania since 1999. At that time, this was a precedent in the almost 50-year old practice of using food vouchers. In 2004, Romania removed the quota limitation as inefficient and unjustified.

In some countries, there are automatic increase mechanisms in place, e.g. the monthly amount is tied to the minimum salary, an economic growth index or an inflation index. No matter how imperfect these mechanisms are, they do not result in unlimited increase of food voucher users and in uncontrolled consequences for the government budget. Currently, only in Bulgaria the system still uses the quota principle.

There are a number of regulatory requirements for food voucher operators and supplier commercial outlets, and for the companies employing the beneficiaries, such as:

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<sup>16</sup> See: The Use of Food Vouchers in Bulgaria: A Field Survey Report. See also below the paragraph on "Conclusions from previous studies".

<sup>17</sup> <https://www.infograf.bg/article/1492600326000>



- issuers' capital and capacity;
- voucher securitization;
- and obligations:
  - a. for VAT registration of commercial outlets accepting vouchers,
  - b. employers to be correct payers to the budget
  - c. of bank payment (ensuring traceability of nominal values traded),
  - d. to use the funds paid by employers only for payments in commercial, VAT registered outlets (securing system's liquidity and sustainability, etc.).

These features of the Bulgarian system are among the best worldwide and provide for transparency and stability of the system. It is also worth noting that these characteristics of the Bulgarian legal framework are fundamental for both its positive effect on the shadow economy as well as the relatively quick tracing of demand and supply of food vouchers.

On the other hand, vouchers facilitate employers' competitive positions in the labour market, increase beneficiaries' disposable income, and assist bringing the economy into the light (in terms of VAT and direct taxes).

Bulgaria a country with tradition in home making food. Since even under communism 85% of the urban residents had a house or a slot of land (and close relatives), 60 to 65% of the households had the habit of canning food and home (meat, vegetables and fruits). It was called "Ikonomika nd Burkanite" ("a Jar Economy", in English). This tradition was sustained during the difficult years after 1989, especially prior to 1998. There no detailed survey of this household economy in the recent years. But it is obvious that FV system limits the incentives for the "jar economy", create jobs owing to the positive effects on consumption and the improves nutrition quality.

For Bulgaria, these effects are evident since the introduction of the system. In 2010, a study by KC2 and Industry Watch (led by the author, and including a nationally representative poll of companies and employees), identified the impacts on the shadow economy (2011) and, in 2012, updated the values of fiscal, social and economic effects.<sup>18</sup>

### **The System in 2017: elements of inefficiency**

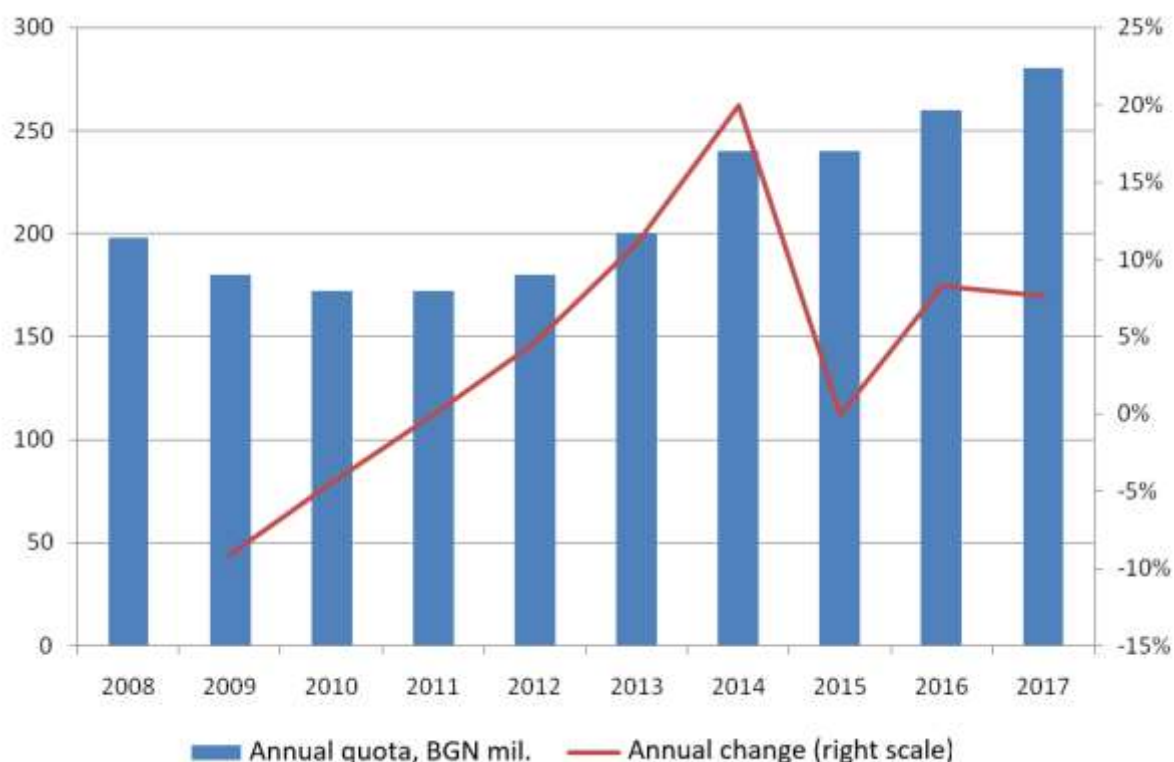
After freezing the overall food voucher quota in 2015 at its previous year level of BGN 240 mln, two consecutive years with a BGN 20 mln annual increase followed, thus reaching BGN 280 mln in 2017. The number of individual quotas has remained unchanged since the start of the program – BGN 2 mln, so the overall amount is allocated into 140 individual quotas. Food voucher operators, depending on their market presence, quantitative and qualitative characteristics of employers using vouchers, utilized them on an ongoing basis.

### ***Higher demand***

Subject to the regulatory requirements, until the end of 2017, the voucher system is available to almost 389,000 employees out of 3 mln working population. This is below the level of demand, as the set quota exhausted in August, which led to shortage in the last four months of the year. If the rate of demand of the period January-August 2017 were to remain throughout the remainder of the year, this would have resulted in a deficit of supply of food vouchers of about BGN 93 mln.

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<sup>18</sup> Some of these findings are summarized below.

**Chart 6: Amount of the food voucher quota (BGN mln) and annual change (%)**

Source: Ministry of Finance

On the chart, three periods can be discerned – slight contraction and freeze of the quota in the period 2009-2012, followed by moderate growth.

### ***Regular depletion of the overall quota***

In 2009-2012 the decrease of the ceiling can be accounted for by the onset of the economic crisis and then the economic rebound, although the policy during this period was only consistent with the state of the government budget, rather than with the need of additional social expenditures, given the deteriorating condition of the labour market. After the budget stabilized, a gradual increase in the food voucher quota commenced, and in the period 2013-2017 it has been increasing with average annual rate of around 9%.

Even in good fiscal years, such as 2016, when the year closed with a budget surplus of approximately BGN 1.5 bln, and 2017 when the budget surplus amounted to BGN 845 m the quota was exhausted earlier (end of August). The depletion of the total quota in the current and previous years is due to the quota principle of organization.

### **Macroeconomic Parameters**

The adverse effects of the quota organization of the system exacerbated in 2017 as incomes and the economy grew with the highest rates since the 2009 crisis, utilization of capacities in enterprises was at a record high level<sup>19</sup>, and the employment rate reached its pre-crisis levels. The total amount of the quota typically depletes at the end of the third quarter every year, due to the following macroeconomic circumstances.

- In nominal terms household incomes increased by about 46% in the period 2009-2016<sup>20</sup>,

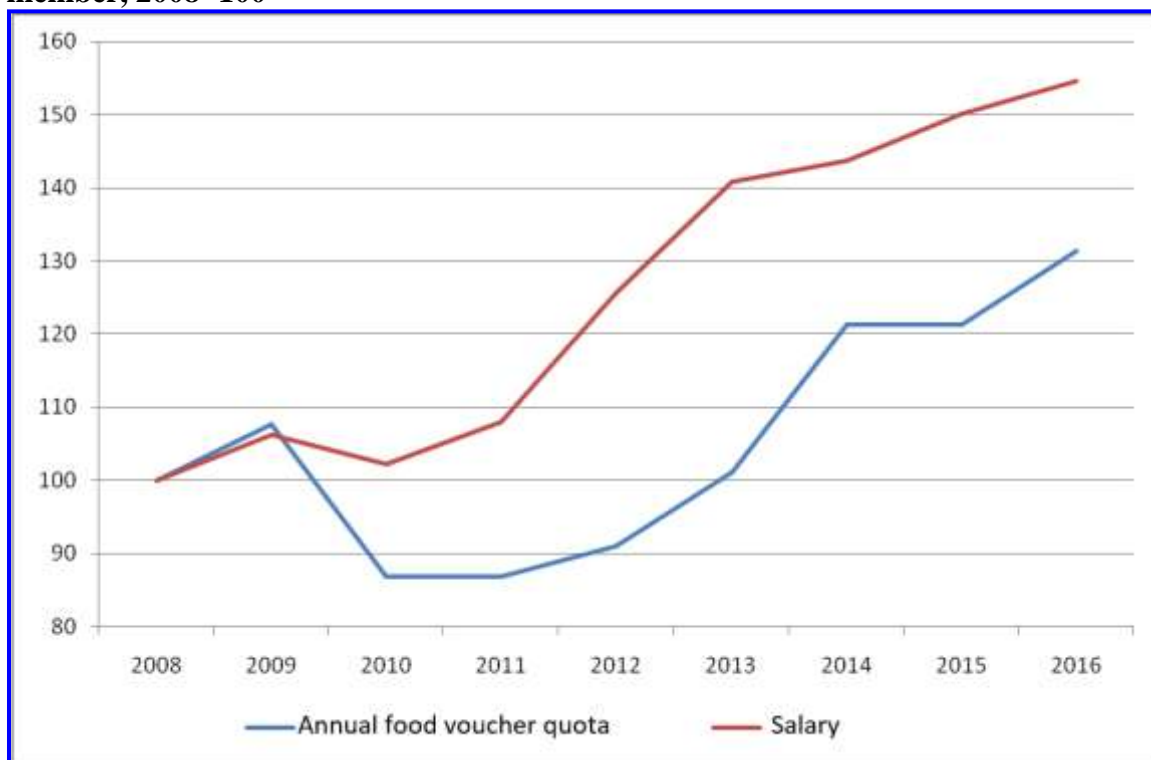
<sup>19</sup> NSI, statistics of business observations

<sup>20</sup> Pre-2008 data are not comparable due to a change in the methodology.

while the food voucher quota increased by 31% annually in the same period;

- Incomes from salaries per household member increased by around 55%. As seen from Chart 2, after an adjustment in 2010, the salary income has been growing in each year of the period under consideration, while with regard to the food voucher quota, both a slower growth and periods of no growth, as in 2011 and 2015, are evident.

**Chart 7: Index of the annual food voucher quota and salary income average per household member, 2008=100**



Source: NSI, own calculations

- On micro level, the tax break for individual users has remained at the level of BGN 60 per month since 2009, but its relative value (weight in the incentives for using vouchers) has decreased, thus accelerating the process of demand at the beginning of the year, increasing the number of entities interested to be included in the system. This regularity emerges from the changing ratio of voucher value to gross and the minimum wage. For example, in 2010 (the last year of contraction of the economy), the tax break accounted for around 9% of the average gross salary for 2010<sup>21</sup> and approximately for 25% of the minimum salary, while in 2016 the same 60 levs are already 14% less than the minimum salary and about 6% of the average salary.
- Another microeconomic factor is the average spending on food and non-alcoholic beverages per household: it decreased by 1/7 as a share of total household spending from about 34% in 2008 to about 29% in 2016.<sup>22</sup>
- Households, however, still allocate a significant part of their budgets for consumption of food and non-alcoholic beverages, which remain as a stable cost item in household expenditure, higher than any other individual item. In other words, any policy aimed at

<sup>21</sup> NSI, Annual statistics of employment and labour cost

<sup>22</sup> NSI, Households income, expenditure and consumption

reducing consumers' costs and increasing their disposable income should aim, primarily, at spending on food and non-alcoholic beverages.

To put it another way, it becomes clear that the total quota is insufficient, its positive effects on household consumption decrease in time and its depletion is an annual practice.

In the conditions of chronic deficits of supply of food vouchers, due to the quota principle, both beneficiaries (employers and employees), and licensed food voucher operators, as well as the state budget incur losses. Furthermore – the existing situation creates conditions for limiting the access to vouchers, as companies with higher annual turnovers, respectively high levels of available resources, have the capacity to purchase large quantities of food vouchers before other companies. Thus, small and medium companies turn out to be at a disadvantage.

### Identifying the effects on the government budget: direct and real impacts

#### *Conclusions from the reports of the Ministry of Finance*

*Table 1 shows the shortfall for the state budget; the data is from publicly accessible expenditure reports of the Ministry of Finance.<sup>23</sup>*

There are some peculiarities, which help interpreting this information. The shortfall for the state budget as summarized in Table 1 does not represent any firm pattern of correlation between the tax breaks provided and “the loss” of tax revenues, which vary from 4.6% to 10%, and between the quota increase and the loss of revenue related to it. Obviously, the budget revenue performance results from real economy dynamics, business cycle and market conjectures. Thus, it is not clear why a decrease of the quota in 2010 has resulted in an increase of the loss of revenue. The same applies to 2011, when the quota remained unchanged, but the Ministry of Finance reported higher loss of tax revenues. In the period 2008-2016, the total amount of the food voucher quotas amounted to BGN 1.8 bln. The “loss of tax revenue” associated with it amounted to around BGN 135 mln, or around 7%.

**Table 1: Allocated annual quota of food vouchers and loss of tax revenues related to it in the period 2008-2017, BGN million**

	<b>Food voucher quota</b>	<b>Loss of tax revenue</b>	<b>Change of quota vs previous year</b>	<b>Share of the loss of revenue in the food voucher quota</b>	<b>Change of revenue vs previous year</b>
2008	198	9.2	110	4.6%	6.2
2009	180	13.3	15	6.2%	4.2
2010	172	13.4	-41	7.8%	0.1
2011	172	17.3	0	10.0%	3.9
2012	180	13.4	8	7.4%	-3.9
2013	200	19.0	20	9.5%	5.7
2014*	240	11.5	40	4.8%	-7.6
2015*	240	12.7	0	5.3%	1.2
2016	260	25.8**	20	9.9%	13.1
2017***	280	18.2	20	6.5%	-7.6

\*The assessment of the loss of revenues in the MoF report includes food vouchers, additional social security contributions and life insurance premiums and costs of transport of employees

<sup>23</sup> Ministry of Finance, Tax Expenditures Report - <http://www.minfin.bg/bg/175>

and persons employed under management and control agreements, and the values shown in the table are results of own calculations based on historical data from MoF reports.

\*\*As the amount stated in the MoF report is unreasonably higher than in previous years, we presume it includes the loss of tax revenues due to exemptions from additional social security contributions and life insurance premiums and costs of transport of employees and persons employed under management and control agreements. The value in the table is an own calculation based on historical data from MoF reports.

\*\*\*There is no detailed breakdown of the losses of revenue by specific tax measure, and the values shown in the table are results of own calculations based on historical data from MoF reports.

Source: Ministry of Finance, own calculations

### **Quota and corporate tax revenues**

Compared to other preferential tax measures, the loss of revenues due to the total quota exemptions for food vouchers are rather modest.

The 2016 report of the Ministry of Finance indicates that the relative share of shortfall from the tax exemption of food vouchers is around 1% of corporate tax revenues, while the possibility of carrying over of tax losses resulted in loss of revenues amounting to nearly 11% of corporate tax revenues.

### **Effects on the shadow economy**

Due to the specifics of the sectors producing and marketing foodstuffs, food vouchers have more shadow economy reduction effect than other tax breaks. As the Edenred (one of the major food voucher operators on the market) national scale consumer and customer survey from 2017 shows, for close to 30% of merchants, food vouchers represent between 10-30% of turnover, which is a non-trivial size for this particular effect.

Vouchers free resources for consumption, including having positive effect on family consumption; the resources thus freed are used in the tax-transparent section of the market and fall within the context of the decreasing share of household expenditures for food.

The average expenditures for food and non-alcoholic beverages per household decrease, as a share of total expenditures, from around 40% in 2003, to 34% in 2008, to around 29% per household and 30% per individual in 2017<sup>24</sup>. Besides lowering trend of food expenditures and the fact that after 2015 they are the second expense after the group of non-food goods bought by households,<sup>25</sup> the food expenditures are still significant. This means that the role of the food vouchers as a social policy makes a difference and is likely to remain a significant factor supporting household welfare.

Companies using the food voucher system and paying partially or fully the salaries of their employees informally, transfer to the officially reported economy when they participate in this system. Therefore, the system provides an incentive for replacing informal cash payments, up to the amount of the allowable BGN 60 per month, with voucher use. This is particularly important for companies whose official employment contracts are at the level of the minimum wage or the minimum insurable income thresholds and pay the rest of the employee salary “under the table”. In other words, the marginal tax preference has a direct positive effect on not only employers and employees, but also, indirectly, on the economy as a whole. The shadow-economy reduction-effect is in the range from 15% to 25%<sup>26</sup> of the total amount of the food voucher quota. This means that more transactions and funds appear in the formal economy (tax)

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<sup>24</sup> NSI, Households income, expenditure and consumption

<sup>25</sup> Georgi Ganev first revealed this important change in the household situation, see his blog at CLS website: <https://www.cls-sofia.org/blog/>.

<sup>26</sup> This amount is established by a previous survey – ‘The Use of Food Vouchers in Bulgaria: A Field Survey Report’

reports, thus the National Revenue Agency collects more VAT revenues and the so-called social taxes into the state budget. The table shows this effect by year, calculated based on the actually allocated total quota.

If we compare the shadow economy reduction effect even under a conservative assumption of only 15% reduction with the reports of fiscal “losses” (for the years where data is available from Ministry of Finance reports on the “losses”), **we will see this effect does not simply set off the losses, but it also brings benefits.**

**Table 2: Reducing effect of the total quota on the shadow economy (in BGN mln)**

	<b>Real amount of the quota</b>	<b>15% reduction</b>	<b>25% reduction</b>
2008	198	29.7	49.5
2009	180	27.0	45.0
2010	172	25.8	43.0
2011	172	25.8	43.0
2012	180	27.0	45.0
2013	200	30.0	50.0
2014	240	36.0	60.0
2015	240	36.0	60.0
2016	260	39.0	65.0
2017	280	42.0	70.0

Source: MOF, own calculations

With regard to household budgets, using food vouchers leads to higher gross income, higher disposable income and higher food consumption.

Almost 90% of respondents of the 2017 survey confirm that food vouchers lead to positive changes in their consumption patterns - while for 40% they produce greater purchasing power options, for 20% of respondents vouchers bring improvement in the quality of food purchased.<sup>27</sup> Although probably less significant, there should also be effects in relation to other items of the budget behaviour of households (consumption of non-food products, savings and investment in property, education and health).

NSI and BNB statistics indicate positive dynamics of these expenditures. For example, after the recession ended in 2011, household food expenditures declined by 6.4 percentage points (p.p.) as a share of total household expenditure, while transport, leisure time and various goods and services expenditure has increased by 2.2 p.p. during 2011-2017 period. During the same period, there is also a 4.2 p.p. increase in the tax and social contribution expenditures. In 2017 household banking deposits have reached BGN 49.5 bln, which is a 76% increase compared to BGN 28 bln in recession 2010.

#### ***Experience from the year with the smallest quota increase.***

The experience of 2012 is interesting, as this is the year with the smallest total quota increase. Nevertheless, the impacts are significant. From a statistical perspective, the typical household behaviour allows for the assumption that the marginal use of food vouchers generates around 7% higher food consumption<sup>28</sup> and household benefits. All other conditions being equal, in 2012 this means, for example, additional foodstuff consumption of around BGN 12.6 mln, which generated over BGN 2.1 mln additional VAT revenues.

Food vouchers impact income distribution within the family – if one of the household members

<sup>27</sup> FV A/B/C National Scale Survey, B2B Trade Nets, June – August 2017

<sup>28</sup> The Use of Food Vouchers in Bulgaria: A Field Survey Report

receives a voucher, this voucher frees part of the household income for other purposes and thus increases disposable income. Under the World Bank's assumption of around 25% redistribution of income within a family<sup>29</sup>, the BGN 180 mln quota in 2012 freed around BGN 45 mln of income. NSI data indicate that household consumption accounts for around 77% of household spending, which means additional consumption of BGN 34.7 mln can be expected, and the VAT on this consumption would amount to BGN 5.8 mln.

Around 89% of the value added in the Bulgarian economy comes from the price of foods.<sup>30</sup> Therefore, the positive impacts support (*ceteris paribus*, and in a relatively stable market conjectures), first and foremost, national producers. For every BGN 1 worth of food vouchers, the domestic value added increases by BGN 0.20 to 0.25. Hence, in 2012 the additional valued added from domestic sources ranged from BGN 36 to 45 mln, and VAT on it was in the range of BGN 6 to 7.5 mln. The tradeoff of budget revenue shortfall from granting tax exemption for food vouchers amounting to BGN 13.4 mln resulted in higher revenues from consumption at a monetary value of BGN 13.9 to BGN 15.3 mln.

The situation in 2017 looks quite similar and is characterized by expected higher food consumption amounting to BGN 18.2 mln, redistribution in the family – BGN 50 mln and additional value added from domestic sources ranging from BGN 52 to BGN 65 mln. **All this brings BGN 20-22 mln additional VAT revenues into the budget, compared to a shortfall of tax revenues of around BGN 25.7 mln.**<sup>31</sup>

## Popularity and Attitudes to the System

### *The effect of the economic crisis (2007-2010)*

In 2007, in an economic situation of record high foreign direct investment and expected economic growth rate of above 6% of GDP and effective budget surplus of more than 3% of GDP<sup>32</sup>, the total food voucher quota was BGN 90 mln and could be used for tax exemption of BGN 40 per beneficiary (employee) per month. The amount was sufficient for around 183 thousand beneficiaries. The real increase of the quota in the next 2008, which also featured GDP growth, provided benefits for 412 thousand employees.

In 2008, the total quota was increased by 125%, and in 2009 – in a totally opposite economic situation with almost tenfold contraction of foreign direct investment – there was a 7% increase to a total voucher quota of BGN 180 mln (to BGN 213 mln), and the monthly income threshold for food vouchers was raised to BGN 60. There was a more than 28% decline in the number of beneficiaries compared to 2008.

In April 2009, the National Center for the Study of Public Opinion established that:

- 60% of enterprises do not intend to increase the salaries of their employees;
- 34% plan making redundancies;
- 85% of food voucher users were satisfied with their use and – in spite of the total decline of salary income in real terms – wish to receive such.<sup>33</sup>

In 2009, the Association of Food Voucher Operators expected a rise in the number of users to 280-300 thousand, but this did not happen. As already mentioned, the reason was the quota voucher management system, which did not allow for meeting the demand and created –

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<sup>29</sup> Bulgaria: Poverty During the Transition, Report No. 18411-BUL and Bulgaria: Poverty Assessment, October 29, 2002 (World Bank Report No. 24516-BUL, available at: [http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2002/12/06/000094946\\_02112204044990/Rendered/PDF/multi0page.pdf](http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2002/12/06/000094946_02112204044990/Rendered/PDF/multi0page.pdf))

<sup>30</sup> Food vouchers in 2015 System behaviour, socio-economic impacts and reform outlook, Sofia, KC2 LTD, 2015.

<sup>31</sup> We note again that in Table 1 the value from the Ministry of Finance report seems rather high.

<sup>32</sup> From the introduction of the system in 2003, effective budget surpluses were approximately 2% of GDP per annum, the most significant ones being in 2007 (3.5%) and 2008 (3%).

<sup>33</sup> See: <http://www.karierist.com/news/bulgaria/novi-100-hil-rabotnici-vzimata-vaucheri-za-hrana>

intentionally or not – problems with compliance with the regulatory framework of the budget management of food vouchers.

### *Conclusions from previous studies*

In 2010, KS2 Ltd. and Industry Watch<sup>34</sup> conducted a representative survey among participating companies of the reasons, benefits and views to making changes in the food voucher system in Bulgaria. Random interviews by telephone calls in 2015 and the applications for inclusion of new companies into the system indicate the main conclusions from the 2010 survey can be still considered valid today.

More specifically, it is a matter of the following:

1. Social vouchers are perceived as an employee loyalty program and facilitate access to specific goods and services for employees;;
2. The tax exemption is an important (39%), but by far not the only factor for participation in the system; other factors include employee motivation (30%) and corporate social responsibility policy (18%)
3. Companies participating in the system provide other benefits to their employees – both in-kind and in the form of paid services (additional health insurance – 40% of the companies, preventive medical examinations – 78%, and expenditures for security at the workplace – 60%); it should be noted this circumstance is characteristic for companies' behaviour, and not for the food voucher system;
4. Only around 20% of the employees in the companies using food vouchers were employed at the minimum wage – and the minimum wage itself is not of great importance in using vouchers: **for 80% of the companies it is way of complimenting the wage contracts and compete with rivals on the labor market.**
5. The benefits in the form of vouchers are as a whole less than 1% of the annual turnover of the companies;
6. Benefits as a whole are up to 2% of the costs of labour;
7. Generally, the use of vouchers results in an increase of the total salary remuneration;
8. The average effect of increase of the gross salary is by BGN 30-40 per employee;
9. Provided the monthly allowance in vouchers is increased, 24% of employers would unconditionally add the amount to the salary; 24% would use the increase to cut other benefits in kind, and 45% would use them for partial increase of the gross salary; It can be assumed that around 70% of employers would increase employee remuneration in one form or another; It is safe to assume that these attitudes are valid presently, too, as they were in a crisis year such as 2010;
10. Satisfaction with the system is observed in more than 90% of employers and employees; they support the extension of the total quota, and increasing the amount of personal exemption,
11. Extending the total quota by BGN 10 mln would result in net fiscal gains in the amount of BGN 440,000 per annum;
12. Generally, food vouchers are preferred by employers as the most efficient form of corporate social policy;
13. These attitudes prove realistic and probable if one considers the data from the annual reports on “budget losses” of the Ministry of Finance: shortfalls from the voucher system are negligible in comparison to other “losses” and the system is a more effective social policy tool than conventional social policies.

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<sup>34</sup> The Use of Food Vouchers in Bulgaria: A Field Survey Report



### **Economic Consideration for Liberalization of the Quota Principle**

The unit daily value of food vouchers in the country is relatively low – BGN 2.7 per business day and less than BGN 2 per calendar day. This value of food vouchers is at the level of the World Bank's absolute poverty line measure.

This amount and the dynamics of household incomes since 2004 gives grounds to assume with greater probability that, first, the saturation of the demand for vouchers will be a relatively quick process and second, it will help alleviating the poverty level.

The extensive growth of the voucher market by increasing the number of customers would be relatively limited if the quotas are removed because the removal of the quotas will have only partial effect of replacement of salary incomes with food vouchers, since:

- vouchers constitute a relatively small share of labour costs of companies and are used in combination with other social benefits;
- there is a general downward trend of food expenditures as a share of household incomes, and as a share of household total expenditures;
- the expenditures for other household budget items (healthcare, education, leisure, travel, etc.) are increasing.

This effect can be found in large and medium enterprises, with the amount per person being limited in the range from the minimum salary (BGN 460 in 2017) to the average gross salary per month (BGN 1,060 in 2017).

On micro (household) level, the calculus of this limit is obvious from the following idealized nationally average estimate per household:

$BGN\ 1,060 * 2\ household\ members * 29\% \text{ food expenditures} = BGN\ 615 - BGN\ 460\ (\text{quota allowance}) = BGN\ 155\ (\text{per household}).$

This is a potential and theoretically constructed maximum limit, which would reach the effect of substitution in case of elimination of the quotas.<sup>35</sup>

This effect is applicable to enterprises with wages around the country average salary. This helps calculating the total economic effect of saturation of food voucher demand. The experience of the counties with no quotas for food vouchers proves that similar regularities are common everywhere.

Another limitation would arise from the circumstance that staff working on employment contracts would agree only to a partial substitution of income, although they would benefit from it, as the increased share of food vouchers above negotiable thresholds would be perceived as a salary decrease.

This perception arises from the circumstance that employers are competing with other employers in attracting talents, and employees – with other employees. As indicated by the above-mentioned field survey, the food voucher system is part of competition and bargaining for remunerations and benefits in the labour market.

At the time of the increase from BGN 40 to BGN 60 years ago, around 80% of employers availed of this increase for their employees, thus the number of beneficiaries did not grow in de facto linear proportion to the increase of the monthly value.

Based on these microeconomic dependencies, the conclusions are the following:

- Increasing the monthly limit of food vouchers per employee is logical. The amount of BGN 60 was set long time ago. Applying inflation for the period (which is used on an ongoing basis for indexation of other remunerations – from those of notaries and attorneys to collective bargaining agreements), the adequate amount would be BGN 75-80 or 25-33% higher than the current limit. This will likely result in the same

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<sup>35</sup> Food vouchers in 2015: System behaviour, socio-economic impacts and reform outlook.

percentage growth of the voucher market as a whole.

- Due to the above considerations, and in line with the experience from previous years, particularly 2012, increasing the quotas will bring into the light part of earnings, although vouchers are likely to be used mainly in large companies, and they are already in the open. Shadow economy reduction will probably come also from household consumption, intra-family redistribution of income, positive impact on other household expenditures.
- The realistic monthly increase per one beneficiary up to BGN 80 may be allowed with no adverse spillover effects for the government budget only on account of the inflation for a 15-year period.
- The growth of the economy frees resources in large companies for increasing personnel expenditures compared to incomes, and part of this growth made in the form of vouchers. Salary expenditures represent a percentage of total incomes of companies in the economy. If we assume that the percentage remains unchanged or changes at a relatively slower rate, probably another natural limit for the use of vouchers would be established up to a percentage of beneficiaries in a jurisdiction – likely not more than 25-30% of employees, as is the case in the countries without quotas.
- Due to the competition in the labour market, the average remuneration in the private sector has been increasing by over 8% per annum in the period 2015-2017, a rate that may be expected to remain unchanged in medium term; sometimes this is also reflected in the employer-employee contracts (particularly in the quickly developing industries). Part of this growth will be likely rechanneled into free quotas and/or food vouchers (provided the liberalization of the quotas), as it will provide tax savings to both parties.
- However, this increase will not be more than double –  $2 \times \text{BGN } 60 = \text{BGN } 120$ , as the idea is not just to purchase food, but to ensure the worker's normal performance and satisfaction with the conditions of the contract.
- The base vouchers of minimum BGN 2 per employee per day under Ordinance 11 are exactly such – for food when working under hazardous working conditions. The other employers' idea is also to provide for an employee's nutrition during work.

## **Fiscal Costs and Benefits of Liberalization of the Quota Principle**

### ***Main Assumptions***

- The share of informal economy is 20%<sup>36</sup> of the reported economy – in the food production and sales industries (excluding catering establishments) it is a little higher than the average for the economy;
- Regarding tax and social security contribution rates, a 1 percentage point increase of retirement social security contributions is envisaged as of the beginning of 2018 and they will remain at these levels over the period 2018-2020;

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<sup>36</sup> The minimum share of the informal segment of the Bulgarian economy can be calculated using the most reliable quantitative method, known as “contract-intensive money” (CIM) introduced by Christopher Clague, Philip Keefer, Stephen Knack and Mancur Olson in 1997. According to our calculations based on BNB momentary statistics, CIM for Bulgaria is around 17% in the period since the introduction of the system. CIM is determined as the ratio of money kept outside banks to the so-called broad money. See: Christopher Clague, Philip Keefer, Stephen Knack and Mancur Olson, Contract-Intensive Money: Contract Enforcement, Property Rights, and Economic Performance, Working Paper No 151, University of Maryland at College Park, IRIS, 1997, p. 8. However, the CIM method does not take into consideration incomes in kind, estimated by Anton Marinov in 2007 at 25-30%, of Bulgarian households in rural areas (see Anton Marinov, *The Shadow Economy in Rural Regions of Bulgaria*, Springer Verlag, April 2008).

- We have made no assumptions after 2020, as this is the time period with which the Ministry of Finance works;
- The calculations of the net effect on the government budget are made under the assumption that employers' labour costs are equal where vouchers are used and salaries are paid in pecuniary form;
- The real GDP growth in the period 2018-2020 is expected at 3.9% per annum;
- Employment growth in the period 2018-2020 will be in the range from 0.2% to 0.6% annually;
- The use of food vouchers will grow by 21%, 10% and 10% respectively on annual basis in the period 2018-2020; i.e. the steepest increase will be in the first year and the total quota will rise to BGN 364 mln in absolute terms, after which it will grow to BGN 400 and BGN 440 mln, respectively;
- The market potential is related to the number of employees in large and partially in medium-sized enterprises (excluding small and micro enterprises for the purposes of the simulation). Thus, the maximum addressable number of possible users (employees) is around 978 thousand.

***'Zero' year scenario – BGN 340 mln quota***

- Under this scenario the quota amount is increased in the first year to BGN 340 mln (21% increase of the quota compared to 2017), and then the quota is removed.
- As a result, the market size in the second year will increase by 30% compared to the previous one – BGN 442 mln, and in the third it will grow by 10% compared to the previous one – BGN 486 mln;
- The shortfall for the government is mainly from uncollected taxes, which directly increase the disposable income of the private sector of the economy. As a result, consumption and investment are generated, calculated by applying a ratio based on regression analysis of historical data of the Bulgarian economy, which indicate that approximately 97.6% of every additional unit of income in the economy is used for consumption and investment;
- Consumption and investment, on their part, are a basis for generation of tax revenues. The analysis of historical data indicates that from every additional lev of income in the economy the state manages to collect approximately BGN 0.25 tax revenue. By applying this ratio, we come to the additional effect for the government budget, as a result of creating and keeping new jobs.

## Gross costs and benefits for the state budget

**Table 3: Impacts on the economy and the state budget at BGN 60 monthly non-taxable amount, BGN 340 mln quota in the ‘zero’ transition year and removing it thereafter**

Scenario (increase vs previous year)	0 (21%)	1 (30%)	2 (10%)
Total amount of food vouchers, BGN mil.	340	442	486
Loss of tax revenue (7.8% of the amount of food vouchers), BGN mil.	26.5	34.5	37.9
New jobs resulting from the reform, in thousand	1,679	2,026	2,068
Additional revenue from taxes and social security contributions on labour	11.0	14.3	15.7
Indirect benefits	31.9	41.4	45.6
<b>Net effect of the reform</b>	<b>16.3</b>	<b>21.2</b>	<b>23.3</b>
Number of new jobs resulting from growth of economy, in thousand	15,349	10,294	5,168
Tax and social security revenues (excluding consumption) resulting from new jobs, BGN mil.	84.0	60.7	32.8
<b>Total net impact for the government budget, BGN mil.</b>	<b>113.8</b>	<b>94.1</b>	<b>68.4</b>

Source: Updated medium term budget forecast for the period 2018-2020, NSI, own calculations

Under the ‘zero’ year scenario with an increase of the total quota from BGN 280 to BGN 340 mln, the direct losses for the government budget vary from BGN 26.5 mln, through BGN 34.5 mln in the first year of liberalization (30% increase) to BGN 38 mln in the second year after the liberalization. However, the loss of budget revenues means an increase with the same amount of the disposable income of the companies, which opens prospects for new job creation and/or investment.

Table 3 shows the effect of this – creating from 1,600 to almost 2,100 new jobs, which may result in growth of revenues from income and social security taxes between BGN 11 and almost 16 mln. Thus, the initial negative budget shortfall effect is substantially mitigated.

In addition to the direct benefits, the indirect effects, such as those on the shadow economy can be added (assuming 10 and/or 15% reduction) and some value added generated in the domestic economy (20-25%).

For example, in the case of a ‘zero’ year, there will be a BGN 60 mln increase compared to 2017, which would lead to BGN 6-9 mln increase in turnover, with 10-15% reduction of shadow economy, resulting in additional VAT revenues of BGN 1-1.5 mln. The additional domestic value added would amount to BGN 12 to 15 mln, with expected additional VAT revenue of BGN 2-2.5 mln.

In other words, **the direct losses for the budget will be fully compensated by the direct benefits from new job creation and the indirect benefits from increasing the disposable incomes of households, reduction of shadow economy and the additionally generated value added.** Therefore, it is likely that **the net effect of the reform will be positive - from BGN 16 to 23 mln in the three-year period.** (The data presented in Table 3 use a conservative assumptions of 20% additional value added and 10% shadow economy reduction.)

The effects of the expected growth of the economy and new job creation in the next three years should also be added. As can be seen from Table 3, the total net effect for the state budget is positive throughout the period under consideration, owing to the expected increase of the number of employed, and hence – of the additional revenues from taxes and social security contributions on labour.

*No transition year scenario***Benefits and costs for the state budget and the economy****Table 4: Impact on the economy and the state budget at monthly non-taxable amount of BGN 60 and removing of the quota from the next year**

	0 (33%)	1 (10%)	2 (10%)
Total amount of food vouchers, BGN mil.	373	411	452
Loss of tax revenue (7.8% of the amount of food vouchers), BGN mil.	29.1	32.0	35.2
New jobs resulting from the reform, in thousand	1,843	1,882	1,921
Additional revenue from taxes and social security contributions on labour	12.0	13.2	14.6
Indirect benefits	30.3	32.3	35.5
Net effect of the reform	13.3	13.5	14.8
Number of new jobs resulting from growth of economy, in thousand	15,349	10,294	5,168
Tax and social security revenues (excluding consumption) resulting from new jobs, BGN mil.	84.0	60.7	32.8
Total net impact for the general government, BGN mil.	97.3	74.2	47.7

Source: Updated medium term budget forecast for the period 2018-2020, NSI, own calculations

Under the no zero year scenario and liberalization of the market as early as next year the effects are similar, however brought forward in time. That is due to earlier increase of food voucher demand, which will increase during the first year from BGN 280 mln to BGN 373 mln – 33% and it will increase by 10% in each of the next two years. This results in a loss of budget revenues in the range of BGN 29 to 35 mln, and accordingly, to the same amount of increase of disposable income of companies. That could result in creating 1,840 to 1,920 new jobs.

It should be noted that new jobs created under this scenario are by about 130 less compared to the foregoing scenario, but a greater number of them would be created in the first year of the period under consideration. This means that the welfare created will be higher under this scenario, since its positive effects appear earlier in time. The other effects from the expected economic developments are the same as in the foregoing scenario.

The indirect effects resulting from the expected reduction of shadow economy and additional value added generated in the domestic economy resulting from the increased food voucher demand during the first year by BGN 93 mln should also be added to those effects.

Shadow economy reduction may lead to increase of reported turnover in the range of BGN 9.3 mln to BGN 14 mln, and hence, to additional VAT revenue in the range of BGN 1.6 mln to BGN 2.3 mln. The additional value added in the economy would amount to BGN 18.6 – 23.3 mln, and hence, to BGN 3.1 - 3.9 mln additional VAT revenue.

This means that in the first year, the direct shortfalls for the government budget would be additionally compensated by gross benefits from the reduction of shadow economy and additional consumption in the range of BGN 4.7 to 6.2 mln.

Finally, we can also add the expectations for higher household consumption – about 7%, and the results from the World Bank study on intra-household redistribution of about 25%. That would lead to additional household consumption of about BGN 24 mln and additional VAT revenue of BGN 4 mln.

Thus calculated, the initial net shortfall of budget revenues due to the reform, amounting to BGN 29–35 mln for the three-year period again will be compensated by the expected direct and

indirect benefits for the government budget. Thus, the net effect from the elimination of the quotas will be positive and will amount to BGN 13–15 mln. Adding the expectations for additional direct effects from the growth of the economy in the next three years shows that the government budget not only can afford to change the present system built on quota principle, but this would not entail any loss for the government budget.

### ***Technical arguments for liberalizing the quota principle***

Updating the quota in the first year of the reform by 21% will allow for meeting the currently emerging demand and may serve as a basis for a transition period to a system without quotas from 2019 on. The following arguments continue and substantiate of the above-mentioned theoretical and economic reasoning.

The calculations use conservative assumptions of the positive impacts and maximum expectations of adverse impacts. In the computations that direct losses are set off to a significant degree by the positive effects. According to estimates, the net effects are by about 22%-29% lower than the gross ones.

In the first year of the reform, the system coverage would be about 472,000, in the second year – 614,000 and in the third – 675,000.

According to NSI data and expectations for labour market developments of the Ministry of Finance, in the next three years this could mean system coverage of 13%, 17%, 19% of the country's labor force. The last percentage is close to the limit of saturation of the system in other countries.

Due to the nature of the system, the specifics of accounting and tax transparency of relations between suppliers and users of food vouchers, removing of the quota principle would not result in further administration costs of the authorities of the Ministry of Finance. In the past, such increases did not show any negative impact on the economy and on the state budget.

The full version of the calculations shows that the benefits of the new system to a great extent offset the costs also over the years in which those were monitored, and in the forthcoming period without implementing a quota principle.

The present system may be kept in the segment of allocation of funds for tax breaks. As mentioned above, the procedures allow for the supply to follow the demand for food vouchers. It is technically possible for liberalization to be implemented without any increase of the monthly allowable tax break, and to consider its increase thereafter.

### **Fiscal impacts from increase of the monthly preference of BGN 60**

#### ***Explanation of scenarios***

- Three scenarios of increase of the monthly amount of BGN 60 not subject to taxation have been considered: no-change of BGN 60 amount (or “0-scenario”), an increase to BGN 80 (“scenario 1”), and to BGN 100 (‘scenario 2’) under the same assumptions, used in the analysis of impacts of elimination of the quota principle.
- As the increase of the monthly preference may lead to increase of demand, which we cannot project, we use assumptions in the transition year scenario, where the consumption increases by 21%, thereafter followed by increases of 30% and 10%, respectively.
- The effects are presented in Tables 5 and 6 and may be summarized as an increase of the loss of benefits by 1/3 under a scenario with BGN 80 monthly amount and by 2/3 under a scenario with BGN 100 monthly amount, in comparison to the base scenario described above.
- At the same time, direct and indirect benefits for the state budget resulting from creation of new jobs, growth of disposable income of the households, and hence, of consumption,

reduction of shadow economy and additional value added fully compensate the loss of budget revenues due to the reform. The net impact of the increase of the monthly limit to BGN 80 is positive, and is in the range of BGN 13 – 16 mln in the three-year period under consideration.

- The increase of the monthly limit to BGN 100 has also a positive net impact on the state budget, in the range of BGN 15 - 22 mln.

### Results under various scenarios

**Table 5: Impact of quota liberalization under transition year scenario and increase of monthly limit to BGN 80**

	0	1	2
Monthly limit in BGN	60	80	80
Increase of demand vs previous year	21%*	30%	10%
Total amount of food vouchers, BGN mil.	452	588	646
Loss of tax revenue (7.8% of the amount of food vouchers), BGN mil.	35.3	45.8	50.4
New jobs resulting from the reform, in thousand	1 679	2 026	2 068
Additional revenue from taxes and social security contributions on labour	11.0	14.3	15.7
Indirect benefits	37.7	47.6	50.9
Net effect of the reform	13.4	16.0	16.1
New jobs resulting from economy growth, in thousand	15 349	10 294	5 168
Tax and social security revenues (excluding consumption) resulting from new jobs, BGN mil.	84.0	60.7	32.8
Total net impact for the general government, BGN mil.	97.4	76.7	49.0

Source: Updated medium term budget forecast for the period 2018-2020, NSI, own calculations.

Note: approximately 1/5 increase of the demand.

**Table 6: Impacts of removing of the quota under a transition year scenario and increase of monthly limit to BGN 100**

	0	1	2
Monthly limit in BGN	60	100	100
Increase of demand vs previous year	(103%)*	(10%)	(10%)
Total amount of food vouchers, BGN mil.	568	569	570
Loss of tax revenue (7.8% of the amount of food vouchers), BGN mil.	44.3	44.4	44.5
New jobs resulting from the reform, in thousand	1 679	2 026	2 068
Additional revenue from taxes and social security contributions on labour	11.0	14.3	15.7
Indirect benefits	48.6	49.6	50.6
Net effect of the reform	15.2	19.5	21.8
New jobs resulting from economy growth, in thousand	15 349	10 294	5 168
Tax and social security revenues (excluding consumption) resulting from new jobs, BGN mil.	84.0	60.7	32.8
Total net impact for the general government, BGN mil.	99.3	80.2	54.7

Source: Updated medium term budget forecast for the period 2018-2020, NSI, own calculations.

Note: approximately a doubling of the demand.

## Conclusions

- Positive development in the overall economy, wages and productivity, household budget, disposable income of companies and households alike have had an impact on the value of the food vouchers: the real value of the monthly allowance of the vouchers (BGN 60) declined about three times. The inflation rate, typically used as argument for indexation, is not the key factor;
- These are positive effect of the overall being. They, however, speak of:
  - a. The fact that there is little to no risk liberalizing the entire system, and increasing the monthly allowance;
  - b. Retaining the reporting practice, the use of vouchers will thus become self-regulated;
  - c. The lead factor in the process will be already existing rivalry between employers for qualified labor, and the independent from employers macroeconomic factors as propensity to consume and save of the public at large;
  - d. Bulgaria will be no different in this respect other EU member state, using food vouchers;
- Macroeconomic precautions and fiscal conservatism of the period before the introduction of the system are still valid policy considerations today as principles of fiscal discipline but their conditions of the time – high government debt to GDP ratio, outstanding government debt obligations, relative low wage income, minimum wages, high employment and low productivity – today do not constitute a challenge;
- There is little to no justification for government budget revenue shortfall as an illusionary result from the liberalization of the quota principle, and from increase of monthly tax exemption per beneficiary;
- Furthermore, the direct shortfalls are inevitably compensated by the expected indirect fiscal benefits from developments in the economy, labour market, consumption substitution, and higher income and social tax revenues;
- Macroeconomics of the process implies that there are natural limits of saturation of the liberalization. Under the developed scenarios of 30-10-10 percent increase in the first three years (while keeping the monthly exemption per person), the workforce covered will be about 19% in the third year;
- These expectations are confirmed by the NSI statistics and by international comparisons.



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