The pilot spending review on service vouchers

October 2019

by the Ministry of Finance & Budget and the Ministry of Work & Social Economy
with the support of the SRSS

Content

1 Executive summary

This pilot spending review, a novelty in Belgium, has been carried out jointly by the department of Finance & Budget and the department of Work and Social Economy. The Structural Reform Support Service (SRSS) endorsed the idea of a pilot spending review in Flanders. Therefore the SRSS provided a skillful and very much appreciated assistance to support the design and carrying-out of our pilot project. The support consisted of the provision of both an expert with a track record in conducting spending reviews and an expert in the field of personal and household services.
As topic of the pilot we chose the system of service vouchers, and that for several reasons. The service voucher scheme was introduced by the federal government in 2004 and transferred to the regional level in 2015 as part of the 6th State Reform. Given the fact that the scheme was continued in Flanders without an evaluation, the increasing budgetary impact and the rising critiques, we were keen to initiate a spending review on this topic.

During the pilot different workshops have been organised, involving staff members of both departments, representatives of the SRSS, the two experts and academics. Besides this final report, two research papers were produced as well as a summary note on the earnback effects of the system.
In the final report one will find several interesting findings such as

- A description of the different categories of users of service vouchers and their relative importance as well as the distribution of the tax expenditures
- An estimate of the elasticity of the demand for service vouchers with respect to the tax reduction, based upon a natural experiment
- An estimate of the deadweight loss on the labour market
- An assessment of the profitability of the service vouchers firms
- A cost-benefit analysis of the scheme for the different governments involved, highlighting an asymmetric distribution of the costs and benefits between the governments involved
- The proposal to rely on an electronic account minimizing the administrative costs while offering more flexibility and transparency.
- A format to assess alternative policy options

The technical note, “Flanders, Integrating Spending Review in the Budgetary System” by Marco Cangiano, Riccardo Ercoli, Johannes Hers (may 2019), has provided a first but thorough evaluation of this pilot: “this initiative has been of a one-off nature because, unlike other international spending reviews, there has not been a clear political willingness to implement spending reviews while authorising the Departments involved to engage in such exercise under the auspices of the Secretary-General of Finance. As a result, this exercise has been led mainly by the Ministry of Finance. Furthermore, the exercise was carried out in addition to the daily tasks without dedicating any additional resources. The dedication of all the staff involved from both Departments guaranteed the completion of the exercise within less than a year. These conditions are however unlikely to be repeated in the roll out of the spending reviews. While, in principle, the line ministry has a direct interest to better understanding the drivers of their spending, it may also have a disincentive to disclose all the information to the Ministry

of Finance. Hence, the structure of the governance of a spending review has to be designed in a way that provides a set of incentives compatible among all the actors involved. International experience shows that there is not a one size-fits-to-all model and each country needs to find the solution tailor made to their needs."
Therefore the authors put forward in their note a series of recommendations with respect to the current budgetary and policy processes in Flanders in order to successfully make use of spending reviews.

2 Introduction Spending reviews

Sound budgeting requires both fiscal discipline and efficiency in expenditure allocation. Spending reviews are considered to be a useful tool for enhancing expenditure performance, which can be defined as the reinforced connection between funding decisions and policy priorities (shall this policy be funded with public money?) and subsequently between funding levels and results delivered to end-users (what is the value for public money?).
Spending reviews consist in seeking a 'smarter' expenditure allocation across policy priorities based on an in-depth examination of baseline expenditure in light of the policy outcomes pursued, with the objective to detect efficiency savings and opportunities for cutting low-priority or ineffective expenditures in a coordinated effort[1]. They can have two dimensions. Firstly, a strategic dimension questioning the relevance of public funding for a specific policy objective and the depth of the involvement. Secondly, a tactical dimension aiming at increasing- for policies passing the strategic test - the efficiency of each public euro spent by optimizing the relationship between expenditure level and impact.

Spending reviews can in many ways contribute to a more growth-friendly composition of the budget. They offer a more sustainable approach compared to linear across-the-board expenditure cuts which may generate negative economic and social impact in the medium and long term, they can create budgetary space for additional growth-enhancing expenditures (e.g. investment spending) or tax cuts. Growth-enhancing expenditures are also likely to deliver more in an ecosystem which has been previously streamlined thanks to implemented spending reviews.

Spending reviews have particular relevance for the euro area, where sound fiscal policies are a key matter of common interest and whose member states have chosen to closely coordinate fiscal policies. The Eurogroup, therefore, has called on euro area member states to actively use spending reviews and adopted a statement outlining the common principles for improving expenditure allocation[2]. There is no one-size-fits-all methodology for spending reviews, however, key success factors can be identified and include a strong and sustained political commitment, a clear strategic mandate specifying the objectives, ownership by the

[1] http://ec.europa.eu/economy_finance/publications/economic_paper/2014/pdf/ecp525_en.pdf

[2] https://www.consilium.europa.eu/en/press/press-releases/2016/09/09/eurogroup-statement/

administration under review, the provision of adequate resources and access to date, integration in the budgetary process, anticipation of implementation, building of transformation capability and performance culture at all levels of public service.

3 The pilot spending review

There are several reasons why the department of Finance and Budget embraces spending reviews as an additional, necessary budgetary tool.

First of all, spending reviews can identify good policies. Currently, the annual drafting and reviewing of the budget is based upon the principles of input-based budgeting. Resources are allocated based on the cost of production factors (salaries and operational expenditures) and subsidies, without a clear link to results. For example, the expenditures regarding high-school education are mechanically determined by the number of pupils. The same holds true for the annual subsidies for universities/colleges which are based upon the number of credits taken up by the total number of students. Only the allocation across different universities/colleges is partially output based.
Additionally, the focus is still mainly on annual payment appropriations instead of policy appropriations and policy results (given the time-consuming yearly process of drafting and reviewing the budget, not much time is left for policy analysis). : As a result 'good or bad policies follow the money' instead of 'good policies getting (more) money'.
The Flemish government has started the transition to performance informed budgeting. The first milestone was setting up a new budget structure to create 1-on-1 links between policy goals and their corresponding budgets. The 2019 budget is the first budget drafted in the new structure The Flemish Government will introduce the new structure in the upcoming policy statements at the start of the next legislature (2020 budget).The next step in the process will be the gaining of insight into the best use of performance indicators in the policy and budgetary cycles. Performance indicators can be a helpful tool for the identification of policy areas that could benefit from a spending review. Spending reviews should become a regular part of the budget process targeting various policies, feeding into the budget dialogue and influencing budgetary decisions.

Secondly, spending reviews can contribute to the achievement of fiscal consolidation targets in a smart and sustainable way. In 2014 the new Flemish government had to implement a two billion euro savings programme to deal with the budgetary consequences of the sixth state reform. Some savings measures were partially evidence based such as the reduction of the tax expenditures for the own dwelling[3]. Others were intended to rebalance the cost-benefit ratio for the consumers without a detailed assessment of the economic and social impact and possible negative spillovers on other policy objectives (e.g. higher tuition fees at universities for students from higher income families, higher price for public transport by bus, higher premium for an independency insurance. There were also quick and dirty across-the-board cuts in expenditures.

[3] There was ample scientific evidence that these tax expenditures by increasing the price benefited in the end the seller of the house and not the buyer.

Furthermore, as spending reviews aim at increasing the value delivered for each public euro spent and have a positive effect on the accountability towards citizens and the Parliament.

Next, spending reviews can help to put some critiques into perspective.

Finally, spending reviews are a useful tool for improving the quality of public finances. They support fiscal responsibility through reviewing priorities in public expenditure, they can contribute to a more growth-friendly composition of the budget and can create additional fiscal room for new policy priorities such as the need for additional public investment spending or tax cuts. To this end, statistics can be useful as a signaling device for the identification of policy priorities, e.g. the evolution of the government capital expenditures can be a wake-up call.
Wrapping up, spending reviews can identify good or better policies and help to shift the focus from "how much money have we spent" to 'what have we achieved with our money'? Spending reviews are not only useful for the identification of smart and sustainable spending cuts but also for the identification of good plans for additional spending.

The above mentioned elements, combined with the call from the Eurogroup to actively use spending reviews as a tool for systematic and in-depth public policy evaluation, and a fruitful working visit to the Dutch Ministry of Finance in the autumn of 2017, convinced us of the added value of spending reviews. As we decided to explore the possibility of introducing this tool in Flanders, we had the opportunity to accelerate our learning process with the help of the SRSS. To build expertise, we initiated a pilot project in the field of service vouchers for domestic help in February 2018.

The service voucher scheme was introduced by the federal government in 2004 and transferred to the regional level in 2015 as part of the 6th State Reform. Given the fact that the scheme was continued in Flanders without an evaluation, the increasing budgetary impact and the rising critiques, the Department of Finance and Budget was keen to initiate a spending review on the topic. The SRSS endorsed the idea of a pilot spending review in Flanders, carried out jointly by the department of Finance & Budget and the department of Work and Social Economy. The assistance provided by the SRSP (which consisted of the provision of an expert from a EU member state and another from the European Commission with a track record in conducting spending reviews, as well as an expert in the field of personal and household services, to support the design and carrying-out of our pilot project) is helping the Flemish Government to gain expertise in the design and carrying-out of spending reviews and will facilitate a roll out to other policy areas and make spending reviews a regular part of the budget process.

4 Description of the policy field/system

Introduction

The service voucher scheme is a policy measure allowing families to buy household related services at a price competitive with the prices asked for these services in the shadow economy aiming at local job creation. The service voucher is the instrument to organize and finance the scheme. It was introduced by law and has been operational at a federal level since 1 January

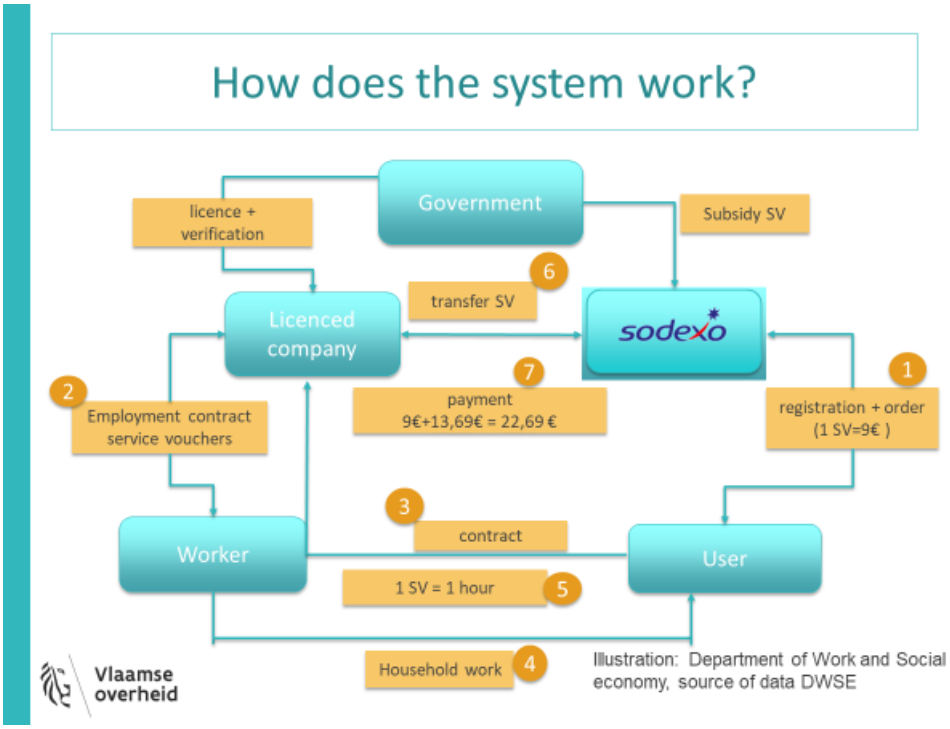
2004. Since July 2014 the regions have been responsible for the scheme but the financial responsibility only started in 2015. Since 1 January 2015 the management has been taken up by the Department of Work and Social Economy of the Flemish government (previously the federal unemployment insurance scheme (RVA).

Objectives:

- Supporting the combination of work and household activities, by outsourcing these activities, so the users can be active on the labour market.
- The creation of qualitative jobs for low skilled persons
- To combat undeclared work in the sector of household activities (turn black market into white regular work)

How does the system of service vouchers in Flanders work?

People can buy subsidized vouchers which they can use to purchase household related services. Five actors are involved in the scheme. The key actors are the users, the companies and the domestic workers. The issuing company is a private contractor issuing the vouchers and coordinating the administrative process. The regional government is subsidizing the accredited firms whereas the households buying vouchers benefit from a tax expenditure..



The users have to register with the **issuing company** and can purchase 400 service vouchers per year. Since 2015 the consumer price of a voucher amounts to 9 euro[4] for one hour of services. The initial price in 2004 was 6,2 euro or an increase in nominal terms by 45.2%. In real terms the increase is 10.6%.

[4] The price of the first 400 vouchers equals 9 euro, 100 additional vouchers can be purchased at 10 euro per voucher.

One voucher corresponds to one hour of household related service. 100 additional vouchers can be purchased at a cost of 10 euro per voucher. Single parents and people with disabilities however can buy 2000 service vouchers per year at 9 euro per voucher.

In the Flemish region, users receive an individual tax reduction of 30 percent for the first 1470[5] euro spent on vouchers in 2018 (income year) and declared in their tax receipts in 2019 (tax year), which reduces the price of the first 163 service vouchers of 9 euro with 2,7 euro (net price of 6,3 euro). The tax reduction is lower in the Walloon and Brussels region resp. 10 percent and 15 percent. Each partner in a couple (married or legal cohabitation) is entitled to this tax reduction, resulting in a double tax advantage. This implies that one parent families can buy more service vouchers than couples (2000 instead of 1000 at 9 euro), but they can only have one tax advantage, while two partners can have the tax advantage doubled.

Covered activities inside the user's house are cleaning the house (windows included), doing the laundry and ironing as well as cooking. Activities outside the user's house include grocery-buying service, ironing and common transport for less mobile people.

The service companies employ the domestic workers and serve as an intermediary between the workers and the users. All kind of companies can be accredited to operate as a service voucher company (commercial companies including temporary work agencies; non-profit and social profit enterprises, municipalities and local welfare offices). For each service voucher purchased until August 2018 the service sector company receives 22,69 euro[6], being 13,69 subsidy and 9 euro from the user. In some cases, this is augmented with an additional administration cost paid by the SV user.

Together with the tax reduction of 2,7 euro this means that in Flanders the voucher is subsidized for about 72 percent: **the government** pays 16,56 (including the tax reduction and administration cost of the issuing company of on average 0,17 per SV)), while the user pays 6.30 euro. In addition to the subsidies, service sector companies can – just like any other company – claim other wage subsidies e. g. for employing disadvantaged groups.

The workers have a service vouchers employment contract with the service sector companies, not with the individual users of the scheme. Wage conditions are laid down in a sectoral collective bargaining agreement (social partners). There are no specific entry conditions for

[5] Under current legislation, the maximum amount that can be declared in the tax receipts is automatically indexed and has evolved as follows:

Tax year	euro	# SV
2015	1400	155,6
2016	1400	155,6
2017	1410	156,7
2018	1440	160
2019	1470	163,3

[6] 23,02 euro for SV purchased as from September 2018 as the compensations increases with the inflation (see section 5.8.1.1)

the workers. They can be unemployed, inactive, retired or have another job (for the relative importance of the different inflows see Desiere (2019))

Main statistics

This analysis was carried out by the Department of Work and Social economy. The total number of service vouchers and users are based upon Sodexo figures. Data on profiles are based on enriched data from the Crossroad bank of social security.

Key figures on the SVS, 2018

Actor	definition	Figures 2018
Users	Number of users having purchased service vouchers over the year [7]	766.510
	Number of service vouchers purchased	86.692.409
	Number of service vouchers spending per user per year	122
Workers	Number of workers over the year (2017)	102.195 (2017)
	Number of clients (users) per worker per month (2017)	12
Companies	Number of accredited companies active over the years (with registered headquarters in Flanders)	1.473
	Number of service vouchers paid out to the companies [8]	85.692.406

In 2018 86 million of service vouchers have been purchased by more than 700.000 Flemish users spending on average 122 vouchers per user, which corresponds to an equivalent of 2,4 hours vouchers per week per user. The scheme gives gainful employment to about 100.000 employees, who have a contract with 1.473 licensed companies. 44% of the workers, work on average with 1 to 5 clients a month, another 40% between 6 and 10 clients, 12% have between 11 and 15 clients and 4% have more than 16 clients a month.

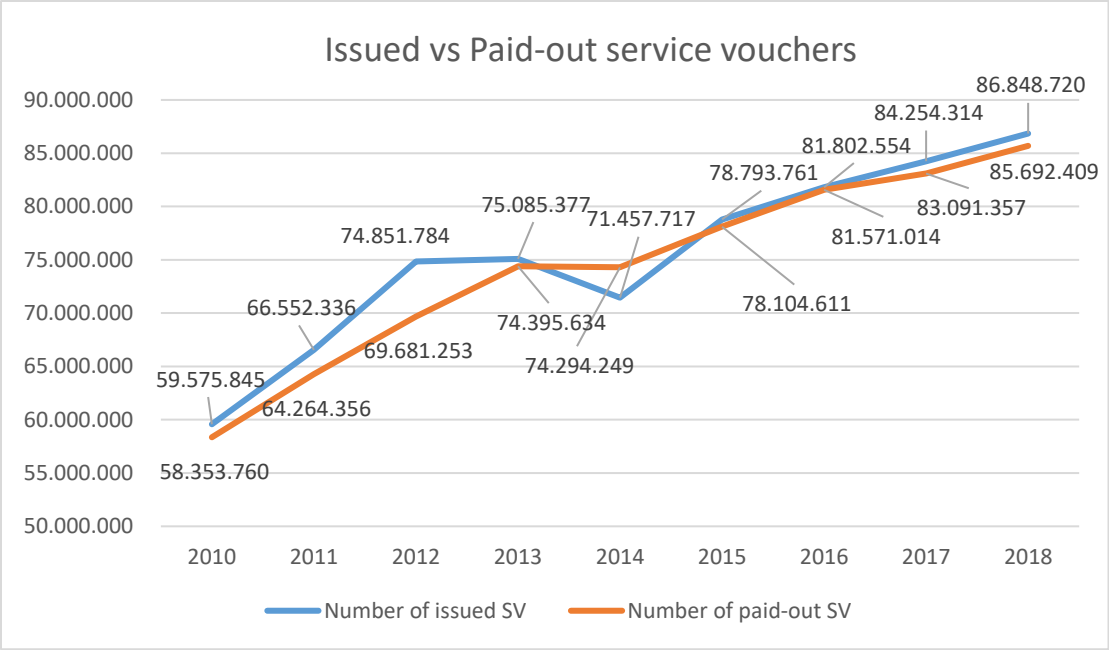
4.1 Number of vouchers and costs

Figure 1 compares the evolution of the service vouchers issued and those paid out. Since 2010, the number of issued service vouchers has always been higher than the number of service vouchers paid out. This was - exceptionally- not the case in 2014, due to the price-rise which came into effect on 1 January 2014. As a result, users brought forward at the end of 2013 the purchase of vouchers, which in turn resulted in a drop in purchases in 2014. The situation normalised in 2015. The difference between the number of service vouchers purchased and paid out can be explained by users being able to exchange vouchers or have them refunded. But this is also explained by the fact that an expiry date is linked to the service voucher, whereby users sometimes do not use the vouchers they purchased in time, which renders them invalid.

[7] the user is the person who orders the service voucher; with at least 1 order is counted as a user

[8] The number of SVS purchased by the Flemish users and presented by the SV companies for payment in the same year

Figure 1 Comparison between issued and paid-out service vouchers (Flemish Region)



Source: Sodexo

4.2 Number of users and profile[9]

Table 1 Evolution of active users of the Service Voucher System

Year	Active Flemish users	Yoy growth in Active Flemish users
2008	349.005	
2009	407.794	16,84%
2010	460.957	13,04%
2011	504.259	9,39%
2012	544.239	7,93%
2013	582.108	6,96%
2014	603.132	3,61%
2015	642.012	6,45%
2016	668.066	4,06%
2017	714.762	6,99%
2018	766.510	7,24%

Source: Sodexo

[9] Data source for the sv users: Sodexo, Department of Work

Table 2 Number of issued vouchers per user

Year	Yearly average	Number of hours per week
2009	119	2,3
2010	129	2,5
2011	132	2,5
2012	138	2,7
2013	129	2,5
2014	118	2,3
2015	123	2,4
2016	122	2,4
2017	118	2,3
2018	113	2,1

Source: Sodexo

Figure 2 Profile of users

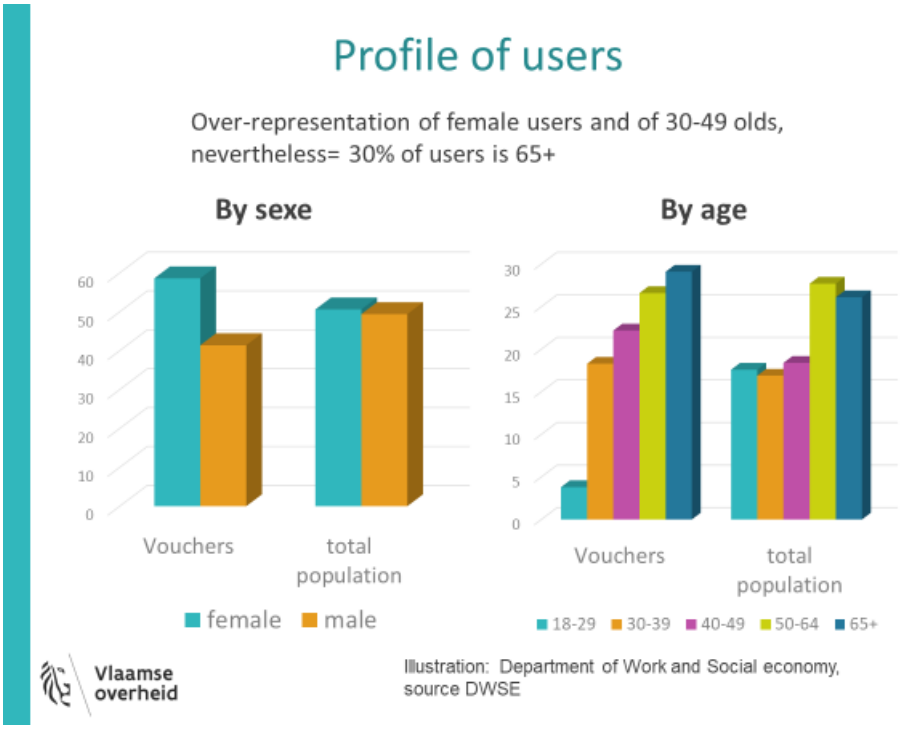


Table 3 Household situation of users (fig 2016)

typ_household	Service vouchers	Total population
	%	
Married with children	34,2%	38,2%
Married without children	21,6%	19,6%
Unmarried with children	10,0%	11,3%
Unmarried without children	4,8%	5,3%
One parent family	6,5%	9,2%
Single	21,1%	13,3%
Other households	1,1%	1,7%
Collective household	0,7%	1,3%
TOTAL	100,0%	100,0%

Source: CBSS data, processed by Department of Work and Social Economy
Definition Household according to LIPRO typology (Imhoff and Keilman (1991). The starting point is the concept of "household-dwelling" (concept of Eurostat), being a unit of permanent occupants who are registered on the same address and living together. The focus is the 'de facto' relation, as it is not necessary that there is a relationship of kinship or a juridical relation (marriage,..)

There is a strong over-representation of **females** buying the service vouchers**.**

As to **age** youngsters (under 30) hardly use service vouchers (3.8% of users). The 30-49 olds are overrepresented in the users population, the age at which many people have children and are working.

Nevertheless 30% of users is 65+. This is more or less the same proportion than in the total population, but it is high from the hypothesis that vouchers are mainly used in the busy life phase by the active working generation in order to have a better life-work balance. The substantial use of SV among 65+ show us that SV also are used for domestic work for elderly who stay living autonomously at home. In this way they allow elderly to postpone the use of residential care and some other welfare services (thuiszorg). Personal domestic care for elderly in a way also support active women to work as they do not have to take up these domestic activities in helping their older mothers and fathers.

The household composition of users reflects the age distribution: 44% of users do live in couples with children. Another 26% are couples without children. Singles without children, probably elderly users, are strongly overrepresented among SV users. One parent families are underrepresented with 6% of users.

Only a very small proportion of the users of service vouchers are of foreign origin (8%) [10].

[10] According to the Flemish definition Belgian origin means born as a Belgian and both parents are Belgian born. Foreign origin means being either from another nationality than Belgian OR having one of the parents with non-Belgian origin by birth.

In Flanders 25% of the couples and 10% of the single households are using SV. The use of SV by couples is the highest for 30-50 and for 80+ age groups. For singles it is the highest among 70 and 80 years. According socio economic position the use is the highest for employed and for retired persons. Finally the number of users increases with income.
What are the motivations of users to outsource household work ? Surveys among users can give some idea. The Idea Consult study 2018 shows that the motives to use SV are strongly related to the profile of users. The largest part, 44%, are mainly dual earning couples with higher incomes and children. They say that they do not have the time to take up these domestic tasks because they need the time to do other things especially work. A second group, 27%, mainly elderly among whom a large part with lower incomes (pensions), do say that they are not able to do these domestic tasks out of physical reasons. Another 21% mention that they do not want to do this kind of work themselves (mainly higher incomes) and finally 10% choses for SV because the quality of the work is better compared with the quality doing the tasks themselves (mainly single men). Based on these figures we can conclude that the large majority 70% seems to have a legitimate need (for which subsidizing is legitimate) , while 30% just seek to have more 'comfort' in their lives.

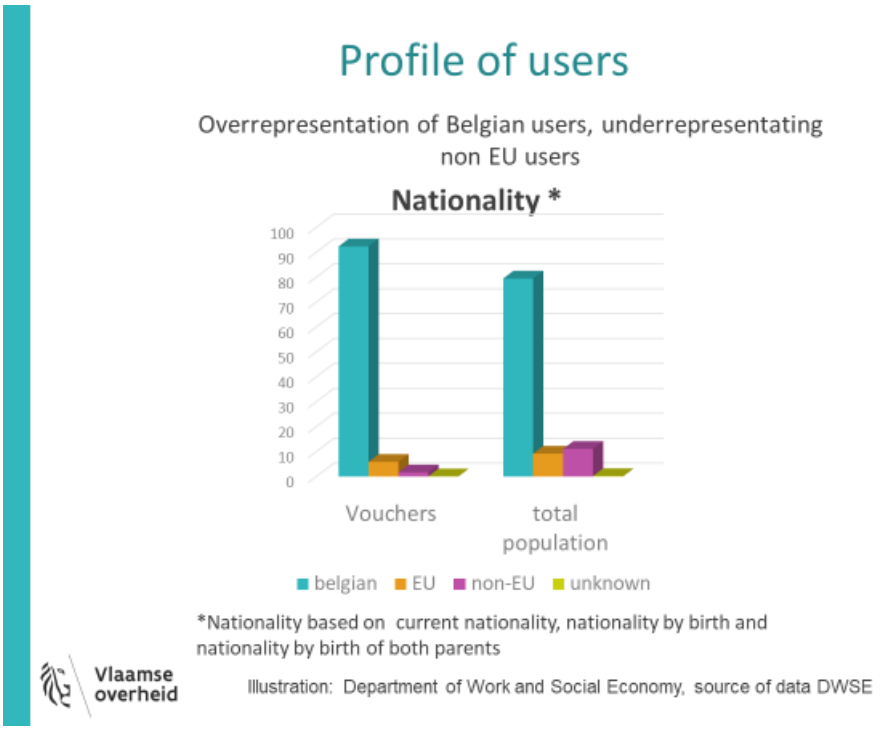


Table 4 Probability to use SV by the profile of users households

	couples	singles
total	23,9	9,8
Age		
<= 30	15,0	1,8
31 – 40	31,2	10,5
41 – 50	29,8	13,4
51 – 60	22,2	12,8

61 – 70	16,3	12,8
71 – 80	20,1	18,7
81 +	30,7	20,0
Socio economic position of users		
Housholds with at least one:		
employed	27,8	18,3
Non employed	17,2	12,3
-retired	19,9	18,9
-other	9,4	5,3
Income groups (€ yearly taxable income)		
0-10.000	7,4	1,9
10.000-20.000	12,1	9,9
20.000-30.000	14,5	10,9
30.000-40.000	15,3	15,3
40.000-50.000	18,7	21,8
50.000-75.000	29,2	29,8
75.000-100.000	45,4	40,3
+100.000	60,9	45,8

Source: Van Heukelom, fiscal data

4.3 Number of workers and profile

1. Number of workers and profile [11]

The number of service voucher workers is based on the workers who are domiciled in Flanders and have worked at least one hour in the service voucher scheme during the year. Workers who do live in Flanders but are working for a Brussels or Walloon user are not included.

Table 5 Evolution service voucher workers, living in Flanders

2013	91.228	
2014	92.571	+1,5%
2015	95.047	+2,7%
2016	98.625	+3,8%
2017	102.195	+3,6%

Source: CBSS data, processed by Department of Work and Social Economy

[11] The profile analysis is based on data from a large representative sample of the National Social Security Office (NSSO) enriched with data from the Labour Market & Social Protection Data Warehouse of the Crossroads Bank for Social Security (CBSS) for the period between 2004 to 2015 , developed by HIVA (Sam Desiere, 2019). The long time period covered together with a panel structure allows us to study some long-term trends and to get an idea on job mobility in the SV sector.

Table 6 **The profile of SVS employees vis-à-vis other employees in 2015**

	SVS employees		Other employees
Gender (% women)	98%		46%
Age			
Average age	42		41
Aged 30 and below	16%		21%
Aged 50 and above	26%		27%
Nationality			
Belgian	71%		94%
EU-15	6%		3%
EU-13	16%		1%
Other non-EU nationality	8%		2%
Missing information	0%		0%
Origin			
Belgian	50%		78%
Information incomplete, but no traces of foreign origin	10%		9%
EU-15	9%		7%
EU-13	17%		2%
Non-EU origin	13%		4%
Unknown non-Belgian origin	0%		0%
Missing information	0%		0%
Educational level		Excl missings	
Low	31%	51%	9%
Medium	25%	41%	18%
High	4%	7%	18%
Missing information	39%	-	55%
Hours worked (% FTE)	50%		78%
Gross monthly wage (full-time employment)			
Average	1,800		3,105
Median	1,809		2,783
Gross monthly (wage)income			
Average	878		2,463
Median	873		2,337

Source: NSSO and CBSS data, processed by HIVA KU Leuven (Desiere, 2019).

Nearly all employees in the SVS are women (98%). All age groups are represented among the SV workers, but younger age groups are underrepresented (16% <30 years compared to 21% in other sectors). One in four (26%) of the SV workers are older workers above 50, which is the same proportion than workers in other sectors and consistent with ageing among the global working population.

71% have the Belgian **nationality,** but alike other EU countries only half is of Belgian origin (=born as Belgian and both parents are Belgian born). In other sectors more than 90% of the employees in Flanders have the Belgian nationality and 78% is of Belgian origin. The share of people from the new member states [12] (EU-13 countries called) and, to a lesser extent, from outside the European Union, is high in the service voucher sector: 16% of SVS employees have an EU-13 nationality compared to 1% in other sectors, while 8% have a non-EU nationality compared to 2% in other sectors. Additional analyses of the department of work on the interaction between age and origin, show that employees of Belgian origin are particularly strongly represented in the older age groups, while younger workers are much more likely to be of non-Belgian origin. So diversity is strongly increasing in this sector as older Belgian workers retire and exit the scheme while young workers from non-Belgian origin enter the service voucher scheme and replace the older workers of Belgian origin.

The **educational background** of SVS employees is of key interest to policymakers as job creation for the low-skilled is one of the prime objectives of the scheme. Unfortunately, complete data on educational levels in Belgium is still lacking. In the data source of the Crossroads Bank for Social Security (CBSS) information on education is missing for about half of the employees. The reason for this is that registration of educational levels for older workers is very incomplete and data have to be collected from various sources. The Crossroads Bank for Social Security (CBSS) is investing in the quality of these data, which will result in an improvement for the coming years. It can nevertheless be observed that SVS employees are generally much lower educated than employees in other sectors: excluding the missings, 51%, 41% and 7% of the SVS employees for whom data on education is available have a low, medium and high level of education [13], respectively, compared to 20%, 20% and 40% of the employees in other sectors. There are also some indications that a large group of so called 'medium' educated SV workers do have to manage on the labour market with a secondary vocational eductional level ('hoger beroepsonderwijs'), so probably not better off than the low skilled (see Sam Desiere, The profile of SV employees in Flanders, p. 24). An interesting observation is that the educational level of workers have remained stable over time. Current inflows of SVS employees are not better educated than previous cohorts, which means that there is no evidence that lower educated workers are being displaced by better educated workers.

Most (female) employees in the SVS **work part-time** in contrast with workers in other sectors. A SVS employee works on average 19 hours/week (50% of a FTE), while employees in other sectors work on average 30 hours/week (78% of a FTE). The average gross monthly wage of a SVS employee working full-time amounts to 1,800 euro, substantially less than the average (3,105 euro) in other sectors. Relatively **low FTE wages** in combination with the low number of hours worked, results in a low gross, monthly wage income of on average 878 euro a month, which is nearly three times less than employees in other sectors (2,463 euro). This monthly wage corresponds more or less with the hourly minimum wage agreed in the collective

[12] EU 13= 13 memberstates joining the EC in 2004, 2007 and 2013 (Bulgaria, Croatia, Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Romania, Slovenia, Slovakia.

[13] These figures correspond with survey data. The Idea Consult study on "Werkbaarheid en wendbaarheid werk in de DCH sector" (2018) survey finds for Flanders more or less similar figures: 42% low skilled; 50% medium skilled, 8% high skilled (p. 13)

agreement for the Joint Committee of the service voucher sector. The unweighted average of the wages of the 4 seniority categories amounts up to a hourly wage of 11,24€/hour for 2018 (see our cost benefit analysis in section 5.5). This corresponds to a minimum monthly gross wage of 1,765 euro for an employee working full-time. Over time the real gross monthly wage of SVS employees has increased from less than 700 euro/month until 2007 to 878 euro/month in 2015, because of risen hours worked. The real wage growth in the service voucher sector was more or less similar than the wage growth in other sectors (+7% compared to +4%).

In order to get an idea of the relation between low wages and the financial situation of households we need households statistics. Contrary to the users, we have no income statistics available for workers so far. The CBBR data gives us some limited data on work intensity [14] and on household situation**. Work intensity** gives us an idea on how many family members are working and hence on working poor households. Many SVS employee are the 'second' earner in the household. Only 17% of SVS employees are living in work-poor households (no other person is working), but compared to the 6% of employees in other sectors living in working poor households, the risk is however significant higher for SV workers. The **household situation** of the workers tell us that 70% are living in couples. However 10% of the SV employees are single and another 15% is single with children, which means for these groups that the wage income of the SVS is the main income source for the household.

Household situation of workers (fig 2016)

type_household	Service vouchers	Total working population
	%	%
Married with children	37,6%	41,6%
Married without children	12,9%	13,0%
Unmarried with children	15,2%	12,8%
Unmarried without children	7,8%	9,4%
One parent family	14,8%	8,4%
Single	9,9%	12,8%
Other households	1,8%	2,0%
Collective household	0,0%	0,1%
TOTAL	100,0%	100,0%

Illustration: Department of Work and Social Economy, source of data DWSE

Vlaamse overheid

The panel data allow us to have an idea on the labour market dynamics of SV workers. They show that the service voucher sector is a dynamic sector. Each year a substantial number of workers enter and exit the sector. New entrants are defined in the following table as persons that did not work in the service sector in the *previous quarter* (even if they had already worked in the sector during previous employment spells). Similarly, exits are defined as employees leaving the sector *for at least one quarter.* The same person can therefore have entered and

[14] **work intensity** being defined as the ratio of hours worked by all household members of working-age to the total number of hours that could have been worked if all household members had worked full-time.

exited the sector multiple times from 2004 to 2015 as well having entered and exited the sector within the same year.

Table 7 The socio-economic position of SVS employees in the quarter before entering the service voucher sector

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Employed	43%	32%	37%	41%	43%	40%	41%	43%	39%	38%	39%	44%
Unemployed	24%	36%	26%	22%	17%	17%	17%	14%	16%	23%	26%	17%
Inactive												
Social assistance claimant	3%	3%	3%	3%	3%	3%	2%	3%	3%	2%	3%	2%
Sick leave and disability benefits*	2%	2%	3%	3%	3%	3%	2%	3%	3%	3%	3%	3%
Other	7%	5%	6%	6%	7%	6%	7%	6%	8%	9%	9%	9%
Unknown status	21%	22%	26%	26%	27%	31%	31%	31%	31%	26%	21%	26%

Table 8 The socio-economic position of SVS employees in the quarter after exiting the sector

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Employed	53%	47%	53%	53%	54%	56%	61%	58%	57%	54%	57%	58%
Unemployed	19%	24%	19%	19%	16%	16%	14%	14%	13%	17%	18%	11%
Inactive												
Social assistance allowance	4%	2%	3%	2%	3%	3%	2%	2%	2%	2%	2%	4%
Sick leave and disability benefits*	7%	4%	5%	4%	5%	4%	4%	5%	5%	5%	4%	6%
Other	4%	5%	5%	6%	6%	5%	5%	7%	8%	8%	7%	9%
Retirement	0%	1%	1%	1%	2%	2%	0%	0%	0%	0%	0%	0%
Unknown status	14%	17%	15%	15%	14%	14%	13%	15%	16%	13%	11%	12%

Source NSSO and CBSS data, processed by HIVA KU Leuven.

The socio-economic positions of *new entrants prior to entering* the sector have remained remarkably stable over time. Over the period 2004-2015 approximately 40% was employed in another sector the previous quarter, 15% to 20% was unemployed[15]; and 40% to 45% was inactive. This largest group of 'inactives' consists mainly of people with an 'unknown' status (20% to 30%), who are neither in formal work, neither on social security benefits before entering the scheme. Only a minority (2%) of the new service voucher entrants are living on social assistance (leefloon/financiële hulp) or sick leave and disability benefits (3%).

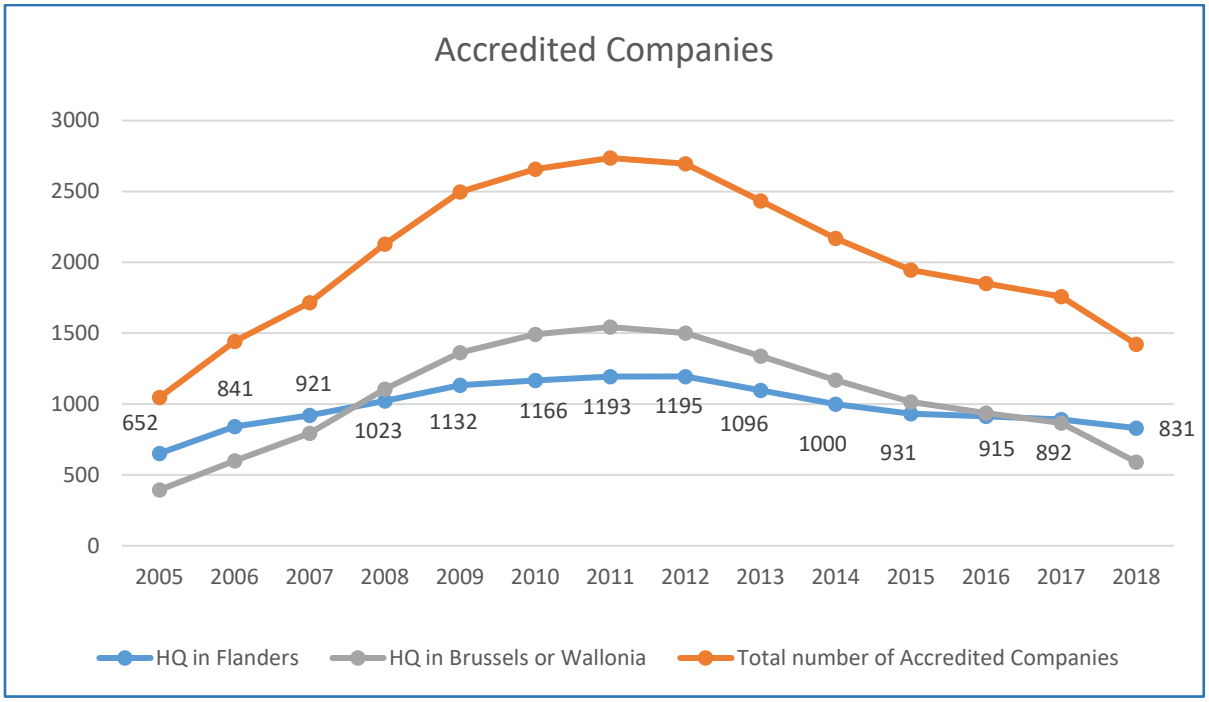
Also the socio-economic position of SVS employees one quarter *after exiting* the service voucher sector has remained stable over time. About 55% of the SVS employees exiting the sector remain employed, but start to work in another sector. 20% to 25% of those exiting the sector claim benefits, in first instance unemployment insurance benefits and to a lesser degree social assistance benefits ('leefloon/financiële hulp') or sick leave and disability benefits ('arbeidsongeschiktheid'). The socio-economic position is unknown for 15% of the workers exiting the sector, implying that they are neither employed in Belgium, neither claiming benefits

[15] In France similar figures are registered.

Comparing inflows and outflows, the sector is still growing so entries are still higher than the number of persons leaving the sector. The scheme results in an employment increase as the number of persons at work after participation in the scheme is higher than the number of workers before entries the scheme. The reverse is that the number of unemployed and the number of inactives is lower after than before the scheme (Desiere, Profile of SV employees, p. 17).

4.4 Companies

Figure 3 Evolution in the number of accredited companies (in Flanders) per Region of HQ, 2005-2018



Source: DWSE

The decrease in the number of accredited companies has already been going on for a few years now. The graph below shows the trend in the number of accredited companies for the Flemish Region, as well as at national level, since 2005. The number of companies with registered offices in Flanders and elsewhere in Belgium has been falling since 2012. This is a sign that the service voucher market is consolidating. Upscaling of companies can increase efficiency and would only be a problem if big companies get a monopoly position.

Table 9 Evolution of the number of companies with registered office in Flanders according to type

Type	Number of companies with registered office in Flanders at the end of 2018			
	End of 2017	Withdrawals in 2018	New accreditations in 2018	End of 2018
Municipality	1	1	1	1
Commercial Companies	416	30	14	401(1)
Temporary employment agency	8	1	0	7
Natural person	85	13	4	76
CPAS	158	11	6	153
PWA	103	28		36(1)
Non-profit	121	11	9	157(1)
Total	**892**	**95**	**34**	**831**

Source: DWSE
(1) 38 PWA's were reformed to a non-profit and 1 to a Commercial company during 2018

Commercial companies still represent the largest number of companies and only a very slight fall in the number of companies was observed here. The largest number of new accreditations also falls within this group. In addition, there are still a number of non-profit organisations and natural persons who started with a service voucher activity.

4.5 Statistics on tax expenditures

This analysis carried out by the Department of Finance and Budget is based upon tax information for the tax years in the Flemish region from 2009 till 2017. The focus of the analysis is on the use of service vouchers as a function of:

- Dependent children
- Income
- Age
- Single/couple

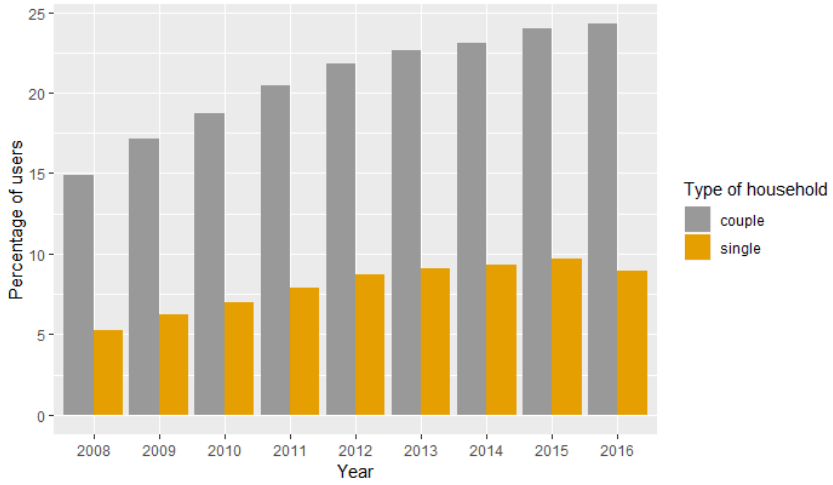
Based on this data it is possible to calculate which percentage of a group uses service vouchers and how much users spend on service vouchers. This important information needs to be taken into account by discussing the policy options.

An important remark about the data is that fiscal households are different from sociological households. Married couples and couples in legal cohabitation are fiscal couples, but couples in de facto cohabitation are fiscal singles. This could have an impact on the interpretation of the data, so this has to be kept in mind.

4.5.1 Multiannual focus

Figure 4 indicates that there is a yearly increase of users of the system, both for couples and singles.

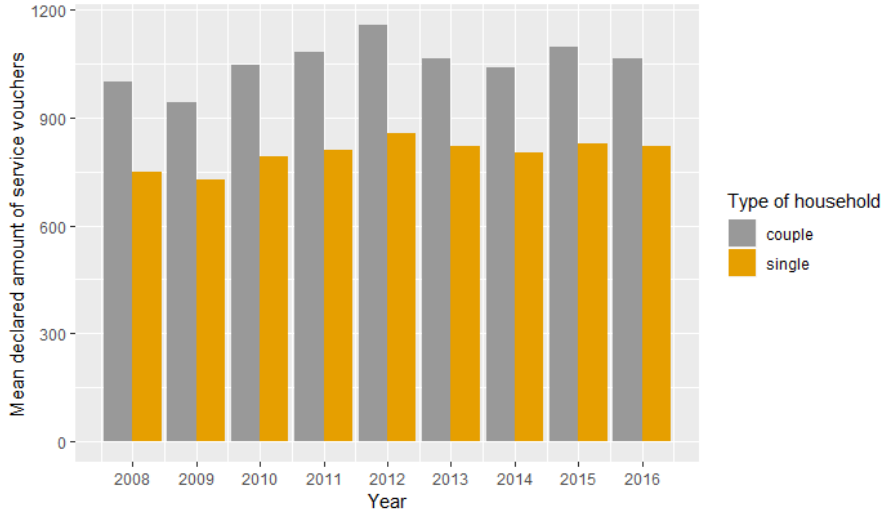
Figure 4 Percentage of users



Source: Calculations of department of finance and budget based on Statbel (Directorate-general Statistics - Statistics Belgium)

The mean declared amount of users remains stable the last few years, as is shown in Figure 5. The fluctuations over time are driven by the various changes that have been made over the years regarding the price setting of the service vouchers.

Figure 5 Mean amount declared by users (in euro)



Source: Calculations of department of finance and budget based on Statbel (Directorate-general Statistics - Statistics Belgium)

4.5.2 Focus on tax year 2017

When looking at the characteristics of the users of service vouchers, we can derive/deduce some interesting conclusions. First of all the impact of household income on the use of service vouchers. To compare families with singles, we will use the OECD equivalised income[16], with a correction for children older than 14 years old. This means that every income can easily be compared between households with different compositions. The household income will be divided by the weight of the household, which means that for example a family with two children that had initially the same income as a single, will have a lower income in our statistics.

To examine the influence of the equivalised income, we divide the household income of the entire population over deciles. The lowest deciles will both contain households with low incomes and households with many children (bigger weighting).

Table 10 shows the division of the incomes over deciles.

Table 10

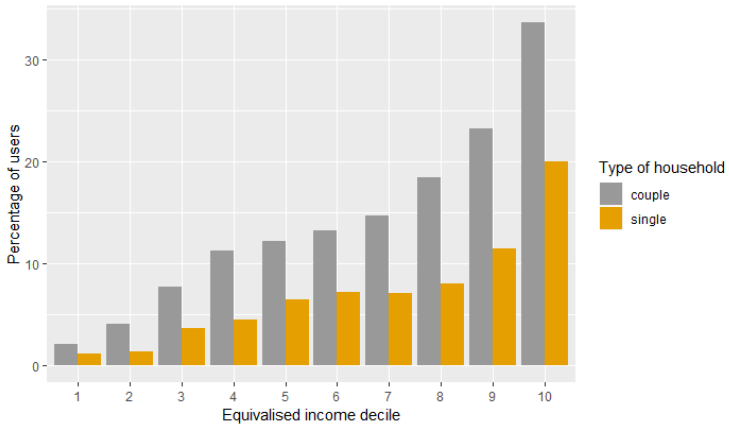
	Income
0%	0.00
10%	3282.78
20%	9629.20
30%	13103.55
40%	15711.05
50%	18653.53
60%	22411.07
70%	26867.25
80%	32594.78
90%	42688.81
	Inf

Source: Calculations of department of finance and budget based on Statbel (Directorate-general Statistics - Statistics Belgium)

[16] The **equivalised disposable income** is the total income of a household, after tax and other deductions, that is available for spending or saving, divided by the number of household members converted into equalised adults; household members are equalised or made equivalent by weighting each according to their age, using the so-called modified OECD equivalence scale. The first adult gets a weight equal to 1, the second adult a weight equal to 0,5, each child under 14 years old counts for 0,3.In order to take into account all chargeable children (also older than 14 years old), and make them compatible with the fiscal data, we give each child a coefficient of 0,373 instead of 0,3. The 0.373 is based upon the number of 0-24 aged who are dependent = children younger than 14 + 14 year olds + 15 to 24 year olds * (1 – employment rate of 25 to 24 year olds)

We see in Figure 6 that the higher the household income, the more users, with a big increase for the 10% highest incomes. Regarding the number of vouchers purchased there is no such positive relationship.

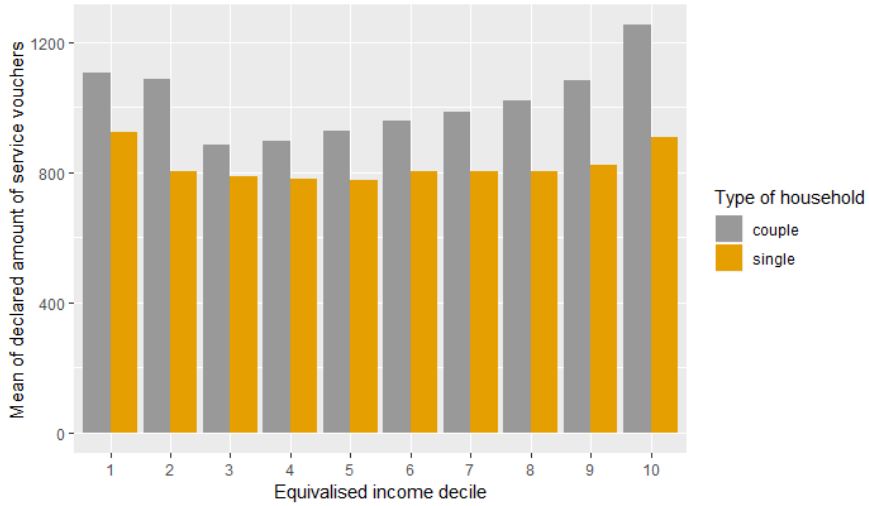
Figure 6 Percentage of users by equivalised income decile and type of household



Source: Calculations of department of finance and budget based on Statbel (Directorate-general Statistics - Statistics Belgium)

When we look at the relation between income and the declared amount of service vouchers, it seems that the mean declared amount of service vouchers by users is more or less stable (a bit higher for the lowest incomes and the highest incomes). It is remarkable that people with the lowest incomes, who use service vouchers, spend more on service vouchers than people incomes in the deciles 3 to 8.

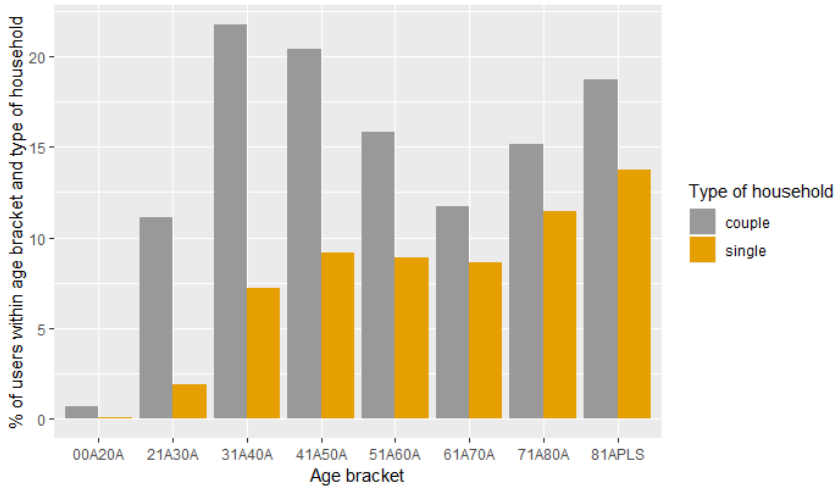
Figure 7 Mean declared amount of service vouchers by users



Source: Calculations of department of finance and budget based on Statbel (Directorate-general Statistics - Statistics Belgium)

At first, we examined a possible explanation that a lot of retired people (with a low income) use a lot of service vouchers. Figure 8 indicates that the percentage of users is high for 80+ and 30-50.

Figure 8 Percentage users by type of household age and age bracket



Source: Calculations of department of finance and budget based on Statbel (Directorate-general Statistics - Statistics Belgium)

Nonetheless,

Figure 9 shows that the share of elderly people (80+) increases the higher the decile. The same effect occurs when we examine this for 70+. Also, the mean declared amount of service vouchers in the first decile is lower for elderly people (see Figure 10). Thus, the higher use of service vouchers in the first decile can't be explained by the use of service vouchers by elderly people.

Figure 9

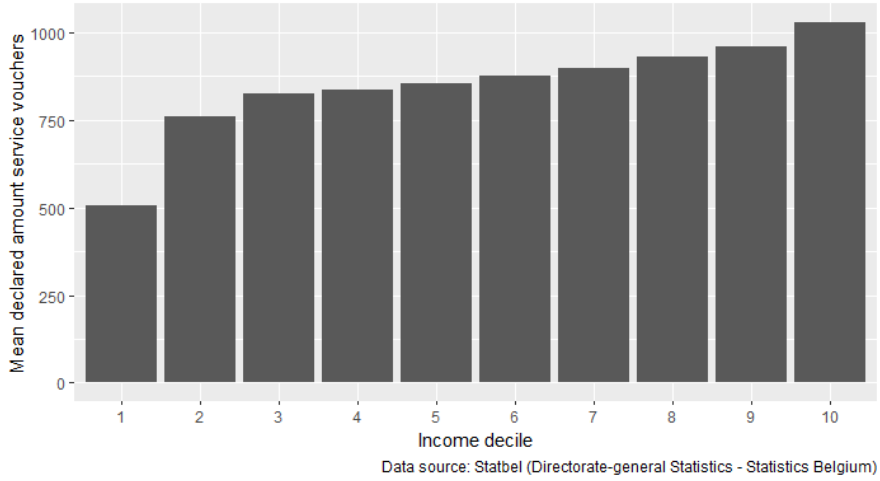
Decile	Number of +70 in decile	Number of users in decile	Percentage users in decile
1	16758	807	0,0481561
2	88142	9532	0,1081437
3	197731	23579	0,1192479
4	190185	29407	0,1546231
5	146258	25046	0,1712453
6	94426	17417	0,1844513
7	55071	11659	0,2117085
8	41968	9761	0,2325820
9	36104	9073	0,2513018
10	24351	6791	0,2788797

Note:
Data source: Statbel (Directorate-general Statistics - Statistics Belgium)

Decile	Number of +80 in decile	Number of usersin decile	Percentage users in decile
1	10070	450	0,0446872
2	43571	5159	0,1184044
3	90871	13160	0,1448207
4	87040	16383	0,1882238
5	57374	12701	0,2213721
6	31931	8016	0,2510413
7	18946	5169	0,2728280
8	14482	4123	0,2846982
9	10905	3296	0,3022467
10	6804	2153	0,3164315

Note:
Data source: Statbel (Directorate-general Statistics - Statistics Belgium)

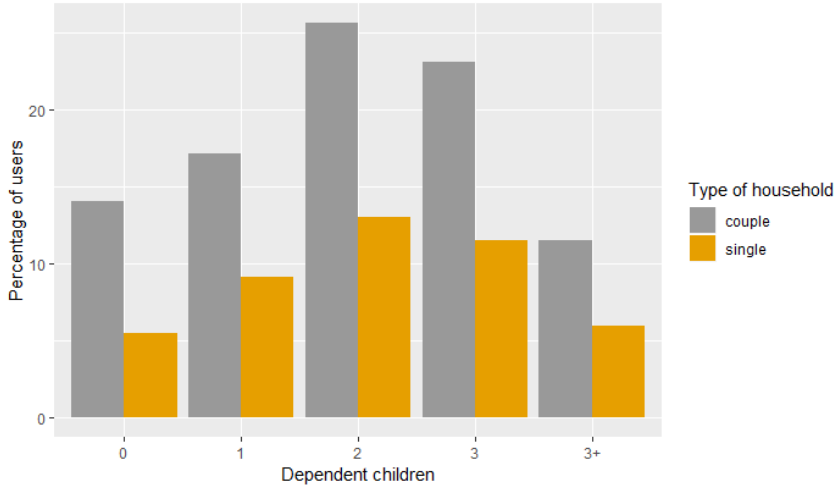
Figure 10 Mean declared amount of service vouchers above 80 years, excl. zero-declarations whole population



Source: dep FB

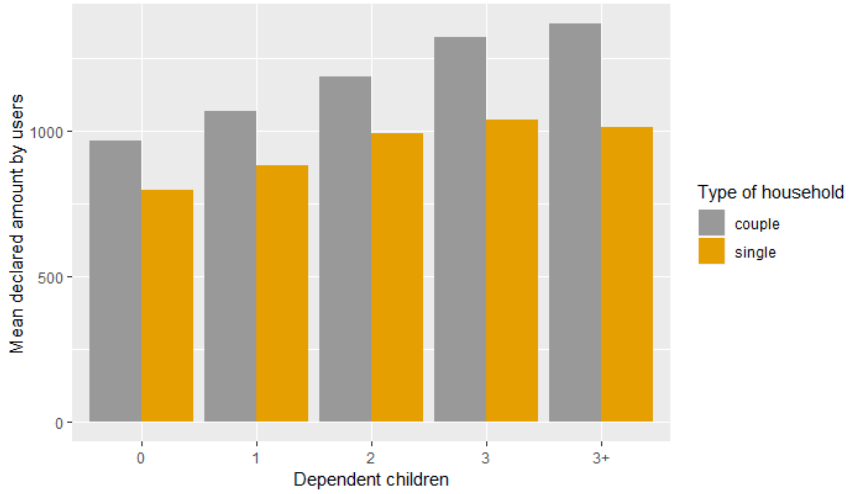
Another possible explanation could be the impact of dependent children on the use of service vouchers. By taking into account the equivalised income, we make a correction on the income for every dependent child. The more dependent children, the bigger the correction and the lower the household income. If we take a look at the impact of the dependent children, we see a positive correlation between both the percentage of users and the mean declared amount by users. However, the percentage of users with more than three children will be lower (but the number of households in this group is also smaller), as shown in Figure 11 and Figure 12.

Figure 11 Percentage of users by number of dependent children and type of household



Source: Calculations of department of finance and budget based on Statbel (Directorate-general Statistics - Statistics Belgium)

Figure 12 Mean declared amount by dependent children



Source: Calculations of department of finance and budget based on Statbel (Directorate-general Statistics - Statistics Belgium)

Based on the fiscal expenditures, we can conclude:

- Over the years, there has been an increase in the number of users of service vouchers, but the mean declared amount remains more or less stable.

- The higher the income of the household, the higher the percentage of users of the service voucher system.
- The mean declared amount of service vouchers is higher for households with children (the more children but less than three, the bigger) and high incomes.
- Service vouchers are relatively most used by people between 31-50 years old and people older than 80 years.

5 Analysis

In this section, we sketch the global picture of current SV system and how it is expected to evolve under constant policy. First, we estimate future demand for SV vouchers and try to identify how demand will change when the purchase price or the tax reduction changes. Next, we analyse the deadweight loss of the measure, which is taken into account to make a cost benefit analysis of the current system. Finally, we try to identify the cost structure of SV companies in order to estimate whether these companies can (continue to) meet increasing demand for SV services.

5.1 Expected demand

5.1.1 The model

The Flemish Department of Work and Social Economy currently uses a linear regression model[i] to forecast **the number of service vouchers** (SV), the dependant variable, in a multiannual perspective (from 2011 till 2023). As well the number of sold SV as the number of refunded SV is estimated.

For budgetary use the model estimates the number of sold SV over the period 2011-2018 and re-estimates using recent observations.
The SV scheme started in 2004, but the model only starts in 2011. Between 2004-2011 the annual inflow of new users in the scheme was rather high, which makes estimates more difficult.

The model features as independent variables (explanatory variables):

- price dummies (value of 1 for 2 months before and up to 4 months after price changes, 0 otherwise), in order to observe anticipating behaviour cfr; an increase in buying SV before price increases
- demographic change: the number of single households and the number of couples with children.
- 'technical' variables: the month of the year (for seasonable effects) and the number of workdays per month (influences as well the number purchased as the number refunded)

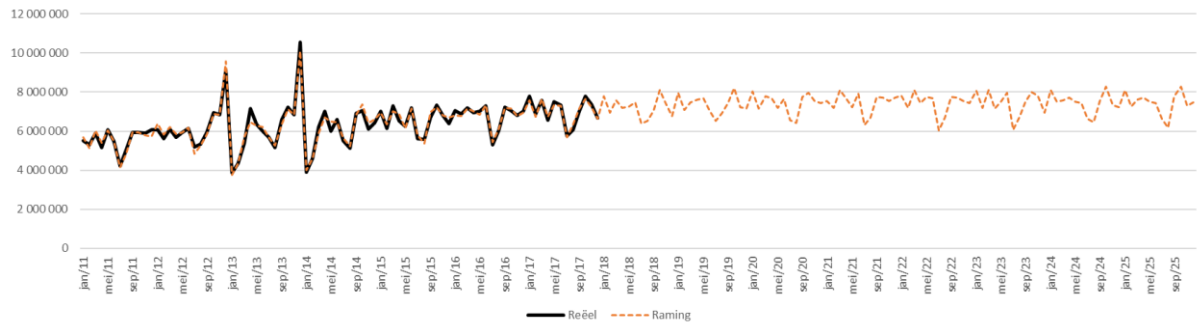
Other cost driven variables were tested such as economic growth, unemployment and family income, but no effects of these variables could be established with the model. Other variables such as the number of elderly people or the female employment rate in full time equivalents could be tested for their significance.

The **explanatory power** of the model for the level of service vouchers sold is high – more than 95% of the monthly variation is explained by the model, and all the variables in the model are highly significant.

5.1.2 Output of the model

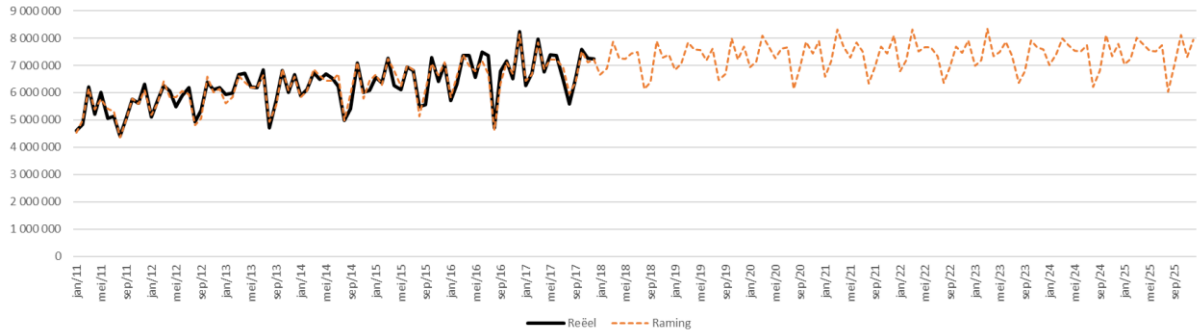
The model predicts a slowdown in the growth of the number of sold SV. Between 2004-2010 annual growth rates were about 10%; between 2010-2020 the growth of the scheme is slowing down. The multiannual estimate expects that the number of SV is still growing but the growth is slowing down. In 2016 the growth was +3,8%. The model predicts an increase in 2018 of +2,7%, +2% in 2019 and +1% in 2020. The main explanation is the decrease in couples with children (which are often users and larger users) while the number of singles, and among them elderly persons, is on the rise. The latter group of users is using on average a lower number of SV.

Figure 13 Sold (issued) SV (2011 up till january 2018, update)



Source: dep WSE

Figure 14 Refunded SV



Source: dep WSE

Wrapping up, the current model seems solid enough to construct **a no policy change baseline** with. It is possible to improve it slightly by playing a bit with the time period used to estimate the parameters. Adding more (macro-economic) explanatory variables does not improve the explanatory power of the model.

Finally, if the model is used to estimate a price elasticity of the demand for service vouchers, it gives a price elasticity of -0,85 which seems to be reasonably in line with (though somewhat lower than) other recent estimates by IDEA (2018).
It is important to keep in mind that this estimate can only be used as a rough, first indication; it cannot be interpreted as a true causal estimate of the effect of price on the volume demanded as we lack a true counterfactual / control group.

5.2 Price elasticity of demand

The demand elasticity ε is calculated as the relative change in the quantity of service vouchers (here approximated by the expenditures), divided by the relative change in the price:

$$\varepsilon = \frac{\frac{Q2 - Q1}{Q1}}{\frac{P2 - P1}{P1}}$$

When calculating or estimating the price elasticity of demand, it is important to make a distinction between the net price and the gross price of a service voucher. The net price includes the tax reduction (for example in Flanders: 6,3 euro per SV) and is lower than the gross price of 9 euro per SV.

There are two ways to estimate the price elasticity of demand:

1) Stated preference

Stated preference is a survey-based technique for establishing valuations. The subject is asked how much they value something. The answer might be based on a lot of things, and it may be very different from their actual behavior.

In the Idea Consult Study of 2018 the demand of service vouchers is investigated by a survey among 2.037 service voucher users, 1.029 non-users and 248 former users. The survey indicates that in Flanders 9% of the users will stop and 35% will use less service vouchers if the (gross) price increases to 10 euros per service voucher. This result could be overestimated because of the fact that the respondents will give a negative reaction in order to avoid a price increase.

2) Revealed preference

Preferences are revealed by studying the actual decisions people make. These may be very different – if not completely opposite from – their stated preferences.

In analyzing the elasticity, Idea Consult calculated the results based on all public available monthly data on the numbers of service vouchers, prices and active users for the period 2009-2015. Because of the fact that the elasticity varies among different price levels, it was necessary to take this variation in prices into account. The correct econometric solution is to estimate a correlation between the log of the dependent variable (number of service

vouchers) and the log of the independent variable (price). The estimated correlations can be interpreted as elasticities. However, this method does not render a true causal effect of the price increase as there is no control group for which the counterfactual (no price increase) is observed and measured. Hence a behavioral response to the price increase could in part or entirely be caused by a change in other factors. Elasticities estimated in this way tend to overestimate the behavioral response.

The results of this analysis are shown in Table 15 and indicate that the demand for service vouchers is elastic in Flanders (-1,16) and Wallonia (-1,22), but inelastic for Brussels (-0,82), which means that a 1% price increase lowers demand with -1,16% in Flanders.

Table 15 Price sensitivity of demand for service vouchers

Regio	Huidige netto prijs dienstencheque	Elasticiteit (op basis van onze elasticiteitsanalyse)
Brussel	€ 7,6	-0,8277
Vlaanderen	€ 6,3	-1,1580
Wallonië	€ 8,1	-1,2150

Bron: IDEA Consult op basis van de elasticiteitsanalyse

This elasticity seems quite large and is higher than the elasticity of -0,85 calculated by re-estimating the model used for the baseline forecast in such a way that the coefficient on price can be interpreted as an elasticity.

However, both these elasticities cannot be interpreted as a truly causal effect of price because in both cases the estimate is not based on a neat econometric design with a treatment and control group (as the estimate for the elasticity of the tax reduction by KUL is, see further).

Regarding the estimation of the price elasticity, we also list a table of results having been used for several cases in France over the years, where an average elasticity of -0,5 was used for all kinds of activities (care and non-care). For non-care activities an average elasticity of -0,8 was used.

-0.6	CREDOC	1995
-0.8	INSEE (Flipo et al.)	1995
-1.35	Flipo et al.	2007
-0.77	FEPEM (see Cour des Comptes)	2010
-0.43	BIPE (for DGE)	2012
-0.55	Bourreau-Dubois et al.	2014

The only estimate of an elasticity based on the method of revealed preference is the elasticity of the tax reduction as estimated by KU Leuven. They computed the demand elasticity of

service vouchers, with respect to the tax reduction. That elasticity measures the percentage change in consumption as a result of a one percentage change in the price. In our context the price change is the change in the tax reduction, so not in the price itself. It is expected that the effect of a decrease of the tax reduction will be smaller than that of a price increase.
Using the rich cross-sectional tax register data for the personal income tax, they used the Walloon policy change as a natural experiment, whereby the Walloon households form the treatment group and the Flemish households constitute the control group. Using the Difference-in-Difference method, they can measure for the treatment effect of the lowering of the tax reduction on the use of service vouchers. This allows us to perform simulations on how the demand for service vouchers would evolve among Flemish households. The KU Leuven finds, as a lower bound, an aggregate demand elasticity of -0,18 with respect to a change in the tax reduction. This implies that a 1% increase in the price of service vouchers (through the tax reduction channel) leads to a 0,18% decrease of demand for the vouchers. This number is a lower bound estimate, as data limitations lead to a slight under-estimation of elasticities.

Conclusion

The -0,85, the -0,8 and the -1,16 of Idea seem quite high. On the other hand, the -0,18 the KU Leuven has estimated for the tax reduction is probably too low to calculate effects of the more visible user price (see 4.3). When calculating our policy options we will clearly indicate for every policy option which elasticity or elasticities will be used.

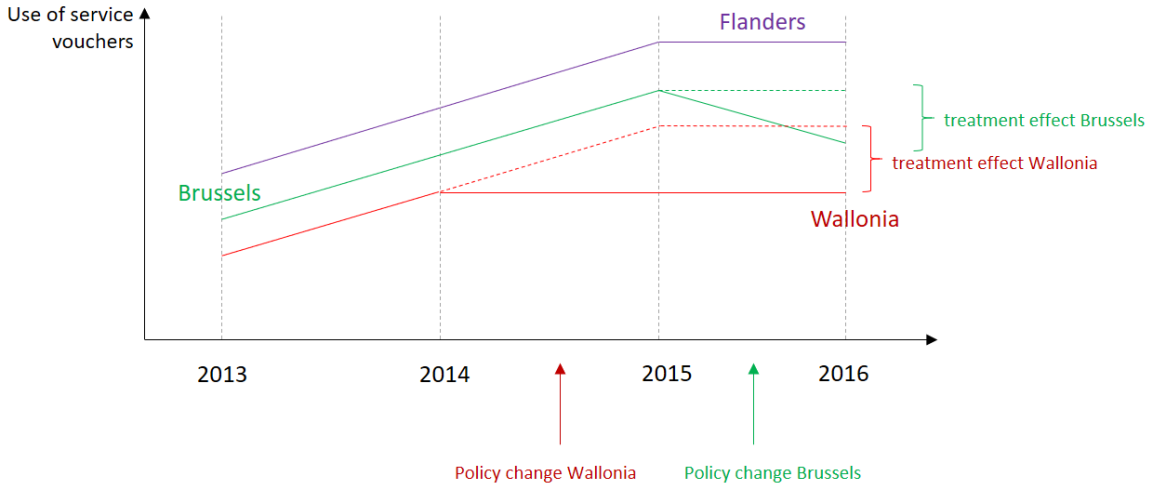
5.3 Tax expenditures

Vanheukelom (2019) studied the impact of the price and in particular of a reduction or abolition of the tax reduction on the use of service vouchers. They estimate the causal effect of the tax reduction on the household service voucher expenditures, through the use of the Difference-in-Difference method (hereafter “DiD”). The DiD is a quasi-experimental method that uses longitudinal data (be it repeated cross-section or panel), containing data before and after an event or reform. By comparing the observed outcomes before and after the event between two groups, of which one was and one was not affected by the event, we can deduce a so-called treatment effect.
The lowering of the tax reduction for service vouchers (making them more expensive to consumers) in Wallonia in 2015 and the similar policy change in Brussels in 2016 constitute two natural experiments, as Flanders left its policy unchanged. Using the DiD methodology we will exploit the change of policy in Wallonia. Flemish and Brussels households thus make up the control group, while the Walloon households are the treatment group for the DiD analysis for the Walloon (2015) tax reduction. Equivalently, in future research Flemish households could constitute the control group for the 2016 lowering of the Brussels tax reduction, where the Brussels households are the treatment group.

The intuition behind the difference-in-difference method is illustrated in Figure 16, where we draw a (hypothetical) evolution in the use of service vouchers. By assuming identical trends for households with the same characteristics across regions, we can –for each subgroup- estimate the disruption in the trend between the treatment and control group. Here, we will

estimate the difference between the observed use of service vouchers in Wallonia in 2015 and the use of service vouchers under the assumption that the households change their consumption just like the households from Flanders do over this time period.

Figure 16 A schematic representation of the DiD method applied to the use of service vouchers



Source: Vanheukelom, 2019

Using a difference-in-difference approach, and cross-sectional tax register data for Flanders and Wallonia, they find elasticities of -0,16 for singles, -0,19 for couples, and -0.18 for the entire population. Both numbers are lower bounds, as the data limitations lead to a slight under-estimation of the elasticity, the issue being more important for singles, for couples the underestimation is thought to be far smaller. The nature of the data allows us to look into the differences in behavioral effects: the elasticities are greater for poorer households, for households with more children, and for younger households. This finding is consistent with the theory of the opportunity cost (= net wage of the users) for choosing between outsourcing and autoproduction by the household.

Table 11 summarizes the elasticities which are very similar for singles and couples: a 1 percent increase in the “price” of service vouchers will lead to a 0.16% decrease in the service voucher expenditures for singles, and a 0.19% decrease for couples. This estimate rests on the assumption that the elasticity is a linear function of the change in the price. The more dissimilar the reform is from the observed Walloon reform, the less likely it is this linear relationship holds.

Table 11 Demand elasticities of service vouchers with respect to the tax reduction

Table 11: Demand elasticities of service vouchers with respect to the tax credit.

Household type	Age	Income								
		0-10k	10k-20k	20k-30k	30k-40k	40k-50k	50k-75k	75k-100k	100k+	All
Single	<= 30	-0.85	-0.83	-0.19	0.11	0.16	0.17	*0.03*	*-0.45*	-0.28
	31 – 40	-1.31	-1.13	-0.66	-0.41	-0.29	0.26	0.16	-0.17	-0.48
	41 – 50	-0.79	-0.86	-0.43	-0.27	-0.19	0.19	0.28	0.36	-0.25
	51 – 60	-0.54	-0.59	-0.17	0.03	0.09	0.28	0.21	0.42	-0.08
	61 – 70	-0.32	-0.31	0.04	0.26	0.28	0.30	*0.48*	*0.62*	-0.03
	71 – 80	-0.15	-0.25	-0.01	0.09	0.14	0.09	*0.35*	*0.88*	-0.12
	81 +	0.08	-0.07	0.14	0.17	0.22	0.51	*0.25*	*1.58*	0.02
	All	-0.57	-0.35	-0.19	-0.11	-0.05	0.24	0.25	0.33	-0.16
Couple	<= 30	*0.70*	*-1.32*	*-0.94*	-0.72	-0.46	-0.35	-0.24	*-0.27*	-0.41
	31 – 40	*-1.02*	-1.50	-1.23	-1.07	-0.83	-0.51	-0.20	-0.07	-0.45
	41 – 50	-1.40	-1.56	-1.26	-1.08	-0.84	-0.32	-0.09	0.03	-0.29
	51 – 60	-1.26	-1.29	-0.86	-0.60	-0.36	-0.06	0.11	0.16	-0.10
	61 – 70	*-0.75*	-0.79	-0.20	0.24	0.40	0.20	0.32	0.28	0.15
	71 – 80	*-0.79*	-0.61	-0.17	0.22	0.40	0.35	0.23	0.15	0.03
	81 +	*-0.72*	-0.55	-0.31	-0.09	0.07	-0.03	*0.12*	*0.31*	-0.26
	All	-1.06	-0.83	-0.42	-0.25	-0.30	-0.22	-0.03	0.07	-0.19
All		-0.67	-0.45	-0.29	-0.18	-0.22	-0.15	-0.01	0.09	-0.18

Note: Groups with less than 500 service vouchers using households are shown in italic and grey.

These population elasticities are much lower than the demand elasticity of -1.16 found by IDEA Consult (2018) or -0,85 calculated for the current exercise. Besides a very different econometric method being used (IDEA Consult using monthly macro data, and the KUL study using annual micro data), probably more importantly the two elasticities are defined with respect to different prices/instruments. The IDEA Consult elasticity is defined with respect to changes in the consumer price, whereas the KUL results are defined with respect to changes in the tax reduction. The (considerable) difference can be explained by the much greater visibility for consumers of changes in the consumer price than equivalent changes in the tax reduction. The latter policy change would therefore result in a considerably lower drop in consumption of service vouchers. Another result of the difference in visibility could be that the elasticity of demand for service vouchers with respect to changes in tax reduction could be smaller in the short run than in medium/long run.

Finally, we should mention that, in the theoretical exercise in Table 13 of Vanheukelom, 2019, the theoretical savings of a similar policy measure as the Walloon region are calculated, whereas in reality, 0,55% of SV users do not obtain the tax reduction or tax credit.

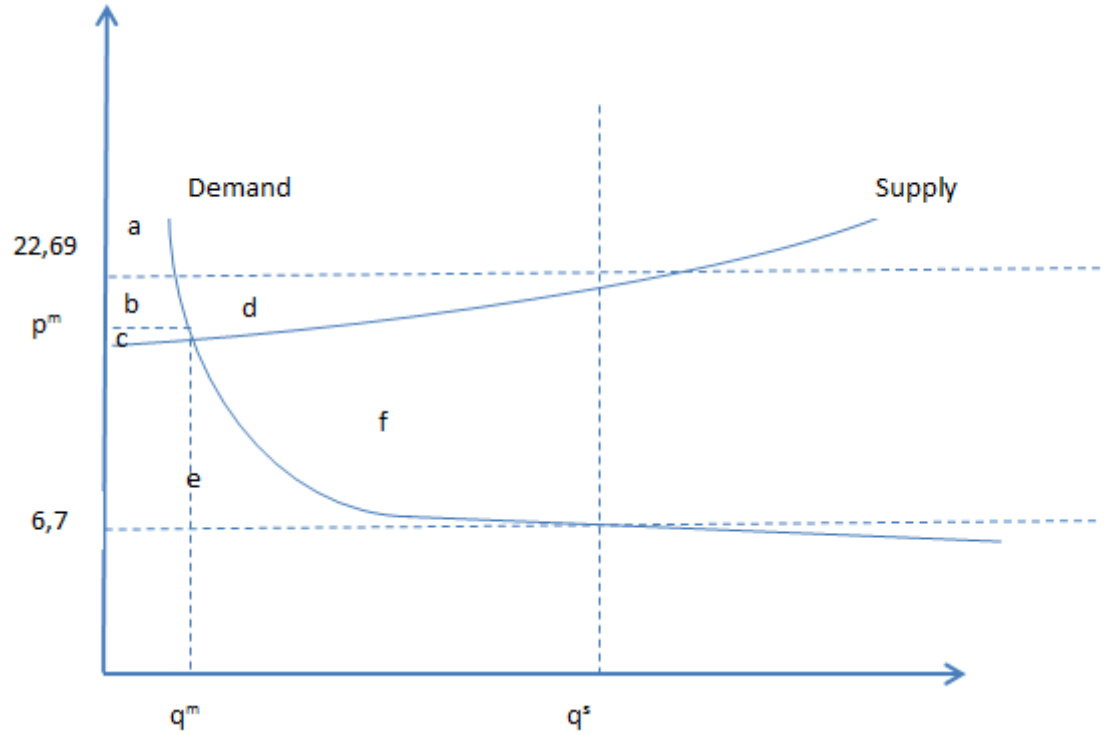
5.4 Deadweight loss

As the so-called Pigouvian subsidies induce extra market activities, we can in theory measure the deadweight loss as the reduction in social efficiency (as measured by consumer and producer surplus). More specifically, the welfare loss (deadweight loss) equals the difference between the sum of the marginal costs of the supply for the additional production and the sum of the marginal valuations of the consumers for the additional consumption.

Figure describes the market for service voucher services. The demand is inelastic for prices which are not competitive with the black market. The subsidies drive a wedge between the producer and the consumer price. (22,62, qs) describes the market equilibrium when subsidies are present whereas (pm, qm) depicts the equilibrium in the absence of subsidies. The amount of subsidies spent equals b+c+d+e+f. These subsidies, which are partially transferred to the consumers and the producers, increase consumer and producer surplus, respectively by +c+e and +b+d in Figure 1. The increase in social welfare, as measured by the consumer and producer surplus, is smaller than the amount of subsidies. Therefore the subsidies induce a deadweight loss, as measured by the surface f in Figure 17.

Whether we have a consumer subsidy or a producer subsidy, motivated by whatever kind of policy(employment, economic policy) in the end the deadweight loss is determined by the elasticities of the demand and supply curve. Take the extreme example of an inelastic demand curve : in both cases, whether we have a consumer or producer subsidy , there is no change in total welfare (q remains unchanged), there is only a redistribution effect, but the subsidy has a windfall/deadweight effect because there are no behavioural effects (q unchanged). In other words, the kind of policy may determine which side of the market will be affected but in the end the elasticities determine the final outcome (cf in normal markets it doesn't matter which side of the market is taxed).

Figure 17



Source: dep FB

For sure, the scheme entails a welfare loss (deadweight loss) equal to the difference between the sum of the marginal costs of the supply for the additional production and the sum of the marginal valuations of the consumers for the additional consumption. The subsidy should account for positive externalities not taken into account in the demand and/or supply curve.

But not knowing neither the private and social demand curve nor the private and social supply curve, we cannot estimate the order of magnitude of the welfare loss. Moreover, there could be an additional loss of social surplus because of (if any) crowding out of demand and supply of household services in non-subsidized sector. In the service voucher system both the consumers and the producers receive a subsidy from the regional government. Strictly speaking, these subsidies do not entail a substitution effect since the subsidies are not linked to specific characteristics of the workers in the service voucher sectors. However, the question is whether activities in the service voucher sectors are substituted for activities/employment in the regular sector. Put differently, is there a crowding out of jobs in the regular sector? Such a crowding out could affect both the household service sector itself and the labour market of lowly skilled labour. In the household services sector, it can be expected that the creation of the service voucher sector creates competition with similar activities already provided by the (limited) official sector which will then no longer be competitive and be replaced by service voucher activity. In the market of lower skilled labour, the success of the new system will increase demand for lower skilled labour which could raise wages (particularly in periods of economic boom) and affect competitiveness of other businesses.

We can alternatively calculate deadweight loss of the service voucher scheme by looking at the effect on the labour market. Indeed, labour policies can typically cause undesirable effects, such as deadweight effects (jobs created that would also have been created in the absence of the policy), displacement effects (job losses in sectors competing with the sector that is being subsidized) or substitution effects (job losses among groups that are not targeted by the policy, in favour of targeted groups).

Therefore, in the framework of the current spending review, a study was commissioned to estimate the employment effect of the service voucher scheme (Desiere, Goesaert, Struyven, 2019). This study focused on the (net) job creation of low and medium skilled women (the de facto main target group of the scheme), based on the evolution of the employment rate of low and medium skilled women and the evolution of SV demand per district[17]. The study finds that the deadweight and displacement effects[18] of the SV policy amount to between 7% and 44%, with a baseline of 12,7%. The lower bound of 7% is estimated based on a regression for Flanders only. The upper bound of 44% is found when including the Brussels region in the regression. The evolution in Brussels is particular: demand for service vouchers is high, while

[17] The employment rate is defined as the number of low and medium skilled employees living in a district relative to the total low and medium skilled working-age population living in the district. The demand for service vouchers in a district is defined as the ratio of the number of SV employees living (but not necessarily working) in a district tot the total low and medium skilled working-age population living in the district.
This means that the numerator in the employment rate, which is used throughout the paper, consists of the number of employees living in that region/district (but not the number of jobs created in that region/district, the usual definition of employment rate).
As such, a worker living in district A, working in district B and taking up a job in district A would have no effect on employment rate in A, if previous jobs stays vacant or is cancelled, nor on employment rate in B.
If a jobseeker moves from A to B: there will be an effect on both the numerator and denominator in B but only on the denominator in A. Hence, employment rates increases slightly in both districts
In the study, it is not expected that this would have an important effect.

[18] It is estimated that the SV policy has no substitution effects (as defined above) as there are no strong restrictions on the subsidized target group.

the employment rate of low and medium-skilled women has decreased since 2004. It is not unlikely that the employment rate were to be lower in the case of no service voucher scheme.

5.5 Cost benefit analysis

In a budgetary assessment of the SV system, it is important to look not only at the gross cost for the government, but also at the earn-back effects generated by the system[19]. In other words, we are interested in determining the net cost of the service voucher scheme. The gross cost are made up by the compensation of the service voucher companies, the granted tax expenditures, the operating and training costs whereas, thanks to the system more people are employed, which results in higher government revenues (personal and corporate income tax revenues, social security contributions) and lower expenditures (unemployment benefits, elderly care).

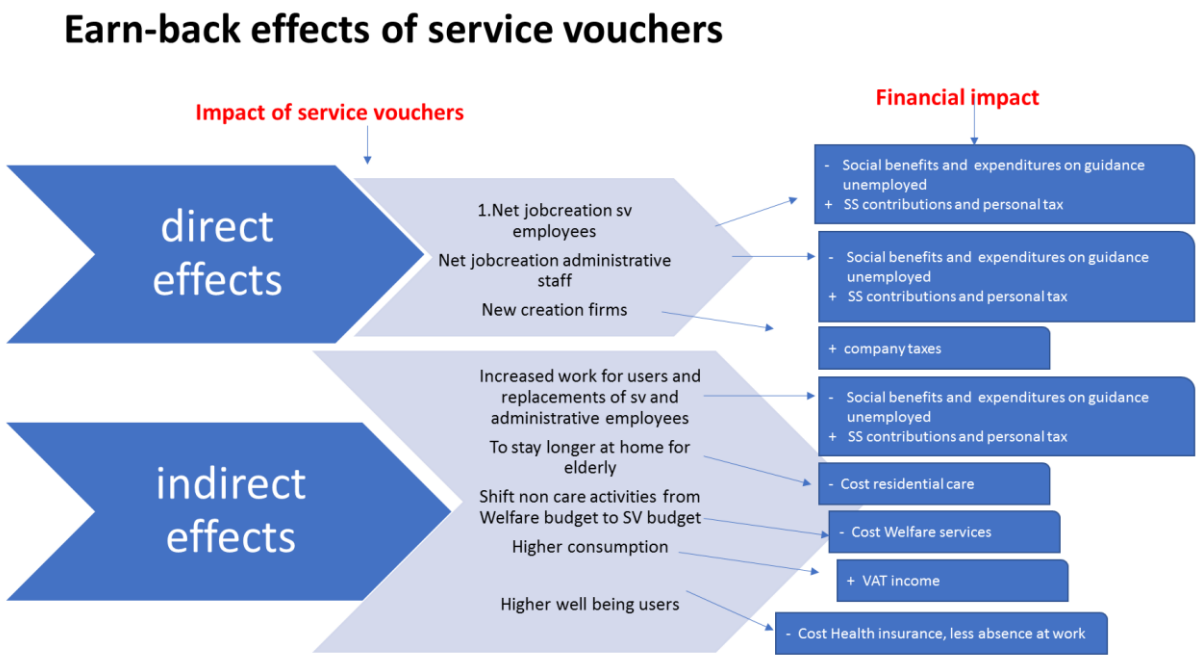
Hereby, we made a distinction between direct and indirect earn-back effects. For the former, we distinguish earn-back effects generated directly via the SV employee and via the SV company. We do not take into account macro-economic (second-round) effects.
Specifically, the direct earn-back effects taken into account are:

1. the savings in unemployment (or other) benefits that are no longer paid out when an inactive or an unemployed person is employed (federal level)
2. the increase in social security contributions and PIT because of the net employment effects (service voucher workers and managerial staff) (federal/regional level)
3. the additional taxes and charges paid by the SV companies (federal level).

The indirect earn-back effects are related to the replacements of the service voucher employees in their previous jobs and the extra supply of labour and employment generated by a better work-life balance for the SV users.

[19] Hereby, we are primarily interested in the direct cost of public support and if possible in the earn-back effects but not in macro-economic (second –round) effects ('dynamic scoring effects').

Figure 18 Earn-back effects of service vouchers



Source

Regarding the indirect earn-back effect, we retain two scenarios, whereby in scenario a it is assumed that the effect on additional employment by SV users is double than in scenario b (see further). We explicitly describe the equations being used to calculate the earn-back effects. As the results also depend but to a lesser extent on the deadweight and displacements effects described above, we calculate in the appendix the net cost for different values of deadweight and displacement effects. Moreover, the earn-back effects are asymmetrically distributed between the regional and the federal level.
Subtracting these so-called earn-back effects from the gross cost gives the net cost of the system.
Eventually we compare our exercise with other estimates of earn-back effects.

5.5.1 Assessment of net costs

5.5.1.1 Overview of the net costs

Table 12 summarizes the net costs of the system for the shortlisted scenarios for the year 2018, both in total and for each government involved. In this table, we make abstraction of the fact that Flanders also received additional revenues (grants) since the transfer of the competence for the SV scheme in 2015 (6th state reform, see also section 5.5.1.8).

Table 12 Net costs of the service voucher scheme

in k euro	Scenario a	Scenario b
Gross costs	**1.357.049**	**1.357.049**
of which:		
Federal	**0**	**0**
Regional	**1.357.049**	**1.357.049**
Direct earnback effects	712.833	712.833
of which:		
Federal	690.006	690.006
Regional	22.828	22.828
Indirect earnback effects	466.941	254.940
of which:		
Federal	434.695	238.817
Regional	32.246	16.123
Net costs	177.274	389.275
of which:		
Federal	-1.124.700	-928.823
Regional	1.301.975	1.318.098
Federal Grant	999.174	999.174
VAT-loss (federal)	44.081	44.081
Real net costs: federal	**-81.445**	**114.432**
Real net costs: regional (Flanders)	**302.801**	**318.924**

Source: dep FB and WSE

5.5.1.2 Gross costs

First, we have the direct expenditures on behalf of the department of Work and Social Economy (DWSE) .
DWSE estimates the **number of SV** that will be invoiced between October t-1 and September t and paid out in the course of the budget year t to the service voucher companies[20]. To this end, it uses the model presented in the previous section.

[20] These costs are budgeted in budget line JB0-1JDG2EA-WT

Table 13 Number of SV purchased per month

Factuurmaand	Betaalmaand	Aangekochte dch in factuurmaand	Factuur (aantal*€13,69)
okt/17	jan/18	7.799.034	€ 106.768.775,46
nov/17	feb/18	7.353.731	€ 100.672.577,39
dec/17	mrt/18	6.650.801	€ 91.049.465,69
jan/18	apr/18	7.799.226	€ 106.771.403,94
feb/18	mei/18	6.943.600	€ 95.057.884,00
mrt/18	jun/18	7.580.602	€ 103.778.441,38
apr/18	jul/18	7.196.127	€ 98.514.978,63
mei/18	aug/18	7.267.424	€ 99.491.034,56
jun/18	sep/18	7.468.254	€ 102.240.397,26
jul/18	okt/18	6.392.530	€ 87.513.735,70
aug/18	nov/18	6.515.727	€ 89.200.302,63
sep/18	dec/18	7.061.793	€ 96.675.946,17
Totaal		86.028.849	€ 1.177.734.942,81

Source: Department of Work and Social Economy

This number (86.028.849 in the adjusted budget 2018) is **multiplied** by the subsidy (13,69 euro/SV) , which results in a total subsidy of 1.177.735 k euro.

Given the automatic indexation of the public subsidy of the SV (when the trigger index number is exceeded), a budget is foreseen on a central "index provision" in the budget of the department of Finance and Budget (DFB)[21]. This budget will be transferred to the specific budget line JB0-1JDG2EA-WT when the trigger index number is effectively exceeded in the course of the budget year. The provision amounts to the multiplication of 'the number of vouchers expected to be paid out in the budget year after indexation' and 'the price increase after indexation'.

The adjusted budget 2018 expected that the trigger would be exceeded in September 2018, increasing the subsidy for SV bought as from October 2019. Given that these SV will only be paid out in (January) 2019, no budget was foreseen on the index provision in 2018[22].

Some other costs must be taken into account:

- The expected penalty by the service provider (penalty for not reaching the digitalization objectives)
- The number of SV invoiced but not used (credit note)

Besides these costs, there are also some direct revenues[23]. Service voucher (non allocated) revenues consist of recoveries from SV companies and the service provider, as well as litigation costs. These amount to 1.000k euro in the adjusted budget 2018.

Next, we have the tax expenditures. The tax expenditures are budgeted in the DFB budget. These expenditures are related to the tax reduction that results from the SV that were

[21] Budget line CB0-1CBB2AB-PR

[22] In 2019, however, the budget increased with 28,4 million as a result of this indexation.

[23] Budget line JB0-9JDGAEA-OW.

acquired by users in t-1 and declared in their tax receipt in t (30% tax relief; up to 1.440 euro declared per tax payer in tax year 2018). As a result, the budget in 2018 is related to the vouchers acquired in 2017.
The amount of this expenditure is estimated by the Federal Ministry of Finance (which collects the taxes), based on the latest known actual tax reduction (for the adjusted budget 2018, this was tax year 2016/income year 2015).

Then there are the operating costs, both on the side of Sodexo and DWSE. The administration cost paid to the service provider (the current contract with Sodexo lasts until 2020) equals 0,147 euro/SV in the first half of the year, 0,139 euro/SV in the second half (+21% VAT).

Finally, there are some training costs.

Table 14 Gross costs of the service voucher scheme (regional level)

in k euro	
Direct expenditure	1.163.796
Subsidy (Q-effect)	1.177.735
Unused SV	-12.939
Direct revenue	1000
Tax expenditures	181.084
Operating costs including penalty: Sodexo	7.830
Training costs	4.339
Total	1.357.049

Source: own calculations

Table 15 presents the public expenditures (Gross costs) both on a per SV basis and in total for the year 2018[24]. The expenditure related to the service voucher system amounts to 15,74 euro per service voucher.

[24] It should be mentioned that the (average) tax expenditure per service voucher in 2018 is calculated based on the number of service vouchers purchased in 2017.

Table 15 Public support in 2018 (per SV and in total) [25]

Direct expenditure	13,46	1.163.796
Subsidy (Q-effect)	13,62	1.177.735
Unused SV	-0,15	-12.939
Direct revenue	-0,01	1.000
Tax expenditures	2,15	181.084
Operating costs including penalty: Sodexo	0,09	7.830
Training costs	0,05	4.339
Total	15,74	**1.357.049**

Source: own calculations

5.5.1.3 Direct earn-back effects (national)

The direct earn-back effects consist of

4. the savings in unemployment (or other) benefits that are no longer paid out when an inactive or an unemployed person is employed (federal level)
5. the increase in social security contributions and PIT because of the net employment effects (service voucher workers and managerial staff) (federal/regional level)
6. the additional taxes and charges paid by the SV companies (federal level).

<u>SV employees</u>

The number of service voucher workers in Flanders in 2018 is estimated at about 90.000 (47.423 in terms of FTE, 86.500.353 in terms of hours worked (= SV used)) . There were also 1.808 managerial staff jobs in the service voucher sector.

As described in section 5.4, when calculating the earn-back effects of the scheme, one has to account for the deadweight and displacement effects. These are estimated at 12,7% (with an upper bound of 43,7% and a lower bound of 6,7%)[26]. In other words, for every 100 jobs created in the SV system, 87 (or 56) would have been unemployed or in active in absence of the system.

Hence the net jobs generated by the service voucher scheme are estimated at 90.000 times (1-0,127) = 78.570 (75.514.808 in terms of hours worked). Taking into account the relevant social security contribution rates (lower wages are entitled to reductions of social security contributions) and the relevant average personal income tax rate[27], which is rather low given

[25] In this report we present how the expenses are budgeted. According to the latest information on actual spending, the actual total specific public support amounted 1.350,8 million euro, or 6,2 million lower than the budget.

[26] In the remainder of this section, we will discuss the calculations taking into account deadweight and displacement effects of 12,7%. In appendix 9.2, the calculations are also be presented based on 43,7% and 6,7%.

[27] The respective rates used are 13,6% for the employer social security contribution rate (after targeted reductions), 13% for the employee social security contribution rate and 10,6% for the personal income tax rate.

the low income because of the predominantly part-time jobs, and assuming an hourly gross wage of 11,24 euro, the increase in (in)direct taxes is estimated at 211,5 million euro[28].

Some of these 78.570= 90.000 times (1-0,127) net workers were previously in an unemployment spell or receiving other benefits (social assistance, sick leave or disability benefits), while others were inactive. The transition to work generates lower expenditures on such benefits for those receiving them. Based on the inflow figures of the CBSS, we know that 59,9% of entrants in the SV system in 2016 were previously not working (23,1% were previously receiving unemployment (or other) benefits, while 36,8% of entrants' status was previously unknown (including migrants) or student (hence inactive)). Accordingly we estimate that 30.300 SV[29] employees had been receiving unemployment (or other) benefits. Taking into account an average annual unemployment benefit of 11.368 euro (RVA), the total savings are calculated at 344,4 million euro (90.000 times (1-12,7%) * 23,1%/(23,1+36,8%[30]) * 11.368 euro).

Finally, 8,5 million is taken into account with regards to government income on the tax on insurance (such as work injury insurance) for the SV employees.

Administrative staff

An estimated 1.808 administrative staff members are active in the SV sector (IDEA 2018). Accounting for the usual substitution effect and deadweight loss, the net job creation equals 1.808 times (1-0,127), or 1.578.

Assuming an annual gross wage of 40.827 euro and applying the relevant (in)direct tax rates, the increase in (in)direct taxes equals 41,9 million euro[31].

From the 1.808 times (1- 0,127) were an estimated 14% previously unemployed. The total additional savings in unemployment benefits equal 2,5 million (1.808 times (1- 0,127) *14% * 11.368 euro)

Taxes and charges paid by the SV companies

The system also results in the creation of new companies, which make profits and create new jobs in administration, generating in turn revenues through company taxes and statutory charges and taxes that are estimated at 44,8 and 10,3 million[32].

[28] 89,76 million extra personal income tax and 121,76 million extra social security contributions

[29] We assume that the share of '*entrants* receiving unemployment or other benefits (23,1%) to total unemployed and inactive entrants (23,1+36,8%)' can be applied on the *total net* jobs, or 23,1%/(23,1+36,8%)*78.300.

[30] We estimate how many of the 78.300 net jobs had been receiving benefits before. We do this by using the info on entrants: unemployed/(unemployed +inactive)

[31] 15 million extra personal income tax and 26,9 million extra social security contributions The assumed PIT tax rate equals 26,8% whereas the relevant employer and employee social security contribution rates are estimated at 28,7% and 13,07% …

[32] Here, we apply the same deadweight and displacement effects of 12,7%.

5.5.1.4 Indirect earn-back effects (federal/regional)

Apart from the earn-back effects that result from the direct employment of SV and administrative workers and the creation of SV companies, there are also earn-back effects related to the replacements of the employees and extra supply of labour and employment generated by a better work-life balance for the SV users.

SV employees

A proportion of the SV employees (39,3% of entrants in 2016, CBSS) was previously employed in another sector). As a result of their career move, their position was left vacant and could be filled in by another employee, who was possibly previously receiving unemployment or other benefits employee. In a survey by IDEA Consult (IDEA Consult, 2012), it was found that 52,1% of the jobs were taken up again by new employees. If we assume that a similar percentage of the replacements comes out of unemployment as is the case for new SV employees (23,10%), we can calculate the number of people coming out of unemployment at 3.716 (90.000 times (1-12,7%) *39,3% * 52,1%* 23,10%) or an earn-back effect of 42,2 million (taking into account average unemployment benefit of 11.368 euro).

Administrative staff

Applying a similar approach for the administrative staff, but assuming a higher share coming from employment (53%) an earn-back effect of 0,7 million (1.808 times (1-0,127%) * 53% * 52,1% * 14% * 11.368) can be calculated.

SV users

Finally, there are also indirect effects as the scheme generates an extra supply of labour and employment. Based upon a consumer survey, Idea Consult (2018) assumes that for every 3.6 FTE service voucher worker one additional FTE is created in the rest of the economy[33]. Hence in total 13368 extra jobs in Flanders which generate additional (in)direct taxes.

For these extra jobs, we take into account a total earn-back of 424 million. This consists of on the one hand the extra income taxes (148 million) and social security contributions (265,4 million) that result from more labour participation by the SV users (thanks to the time “saved” by making use of the SV system) and on the other hand the indirect savings in unemployment benefits assuming that 7% of these users were unemployed before making use of the SV system (10,6 million)[34].

As the Idea Consult estimation is based on a survey, some caution is warranted with this estimate. In Desière, Goesaert and Struyven (2019) no positive correlation is observed between demand for service vouchers and the employment rate of high-skilled women. On the other hand, Raz-Yurovich and Marx (2019) find both short- and long-term positive changes in the employment rates of highly skilled women in since the enactment of the SV scheme. We take this uncertainty into account by also calculating the earn-back effect based on 6.684

[33] This calculation is based on survey data that show that 65% of SV users are working, of which 44,4% previously did household activities, of which 34% answered to work more (or not less) thanks to using SV for on average 1,03 days per week.

[34] For these calculations, we make use of the statistics on average wage (47.523), social security contributions (13,07 employee and 28,7% employer) and average income tax (26,8%) used in IDEA Consult (2018).

extra jobs (half of the Idea Consult estimate), which results in a total earn-back of 212 million euro (scenario b in the tables below).

Table 16 presents the earn-back both on a per SV basis and in total for the year 2018. The earn-back (on a national level) related to the service voucher system amounts to 13,64 euro per service voucher (scenario a), or 11,19 taking into account a lower effect on employment by SV users (scenario b).

Table 16 **Earn-back effect (national)**

Scenario a

Earn-back effect		13,64	1.179.774.591
Direct (employee)		6,53	564.452.466
	Income taxe	1,04	89.761.658
	Social security (employee + employer	1,41	121.756.889
	Tax on insurance	0,10	8.484.089
	Saving in unemployment benefits for service provider	3,98	344.449.831
			-
Direct (employer)		1,72	148.380.985
	Statutory charges	0,17	14.989.085
	Income compay tax	1,03	88.950.096
	Income taks, social security contribution and savings in unemployment benefits for administrative staff	0,51	44.441.804
			-
Indirect		5,40	466.941.140
	Income taks, social security contribution and savings in unemployment benefits produced by	4,90	424.001.739
	Saving in unemployment benefits for replacement workers	0,49	42.245.755
	Saving in unemployment benefits for replacement administrative staff	0,01	693.647
	Avoided costs for elderly people	0,00	-
	Avoided costs for migrant women	0,00	-

Scenario b

Earn-back effect		11,19	967.773.722
Direct (employee)		6,53	564.452.466
	Income taxe	1,04	89.761.658
	Social security (employee + employer	1,41	121.756.889
	Tax on insurance	0,10	8.484.089
	Saving in unemployment benefits for service provider	3,98	344.449.831
			-
Direct (employer)		1,72	148.380.985
	Statutory charges	0,17	14.989.085
	Income compay tax	1,03	88.950.096
	Income taks, social security contribution and savings in unemployment benefits for administrative staff	0,51	44.441.804
			-
Indirect		2,95	254.940.271
	Income taks, social security contribution and savings in unemployment benefits produced by	2,45	212.000.869
	Saving in unemployment benefits for replacement workers	0,49	42.245.755
	Saving in unemployment benefits for replacement administrative staff	0,01	693.647
	Avoided costs for elderly people	0,00	-
	Avoided costs for migrant women	0,00	-

Source: own calculations

5.5.1.5 VAT loss

A final negative effect that should be taken into account is the VAT loss that results from the development of the SV sector – which is exempted from VAT – as the value added by the sector is not subject to VAT. In this, two approaches are possible.

First, under the assumption that the SV system has merely lead to a crowding out of black market services by official services, we could estimate the VAT that was paid by the "official" household services sector for activities that are now done under the SV system but were before subject to VAT. Under this approach, the VAT loss is limited to the VAT that was paid before. Indeed, VAT was never paid on the black market, so the crowding out of the black market by the official SV market has no effect on VAT revenues.

A second assumption is that there is not only a crowding out of the black market, but also a growth of the total household services sector as a result of the SV system. Under this assumption, we should add the VAT loss that results from the *extra* activity in the sector (and which is not subject to VAT).

As it is difficult to estimate the historical increase of the market that is not related to a crowding out of the black market, in the current exercise, we use a proxy through the estimation of the deadweight and substitution effect as calculated in section 5.5.1.3. Taking into account a deadweight effect of 12,7%, calculated on a VAT rate of 21% on the total production cost of 22,17 euro per SV, the VAT loss is estimated **at 51,2 million euro**.

Table 17 presents the VAT loss on a per SV basis and in total for the year 2018. These amount to 0,59 euro per service voucher.

Table 17 **VAT loss**

VAT Loss		0,51	
	VAT Loss	0,51	44.081.161

Source: Own calculations

5.5.1.6 Net cost

When comparing public costs, earn-back effects and VAT losses, we find a minimal net cost (on a national level) of 221,4 million euro, or 2,61 euro per service voucher (scenario a) and a maximum of 433,4 million, or 5,07 euro per service voucher (scenario b).

Table 18 **Net cost**

Scenario a

National	per SV	Global
Public support	15,74	1.357.048.942
Earn-back effect	13,64	1.179.774.591
VAT Loss	0,51	44.081.161
Net cost	**2,61**	**221.355.513**

Scenario b

National	per SV	Global
Public support	15,74	1.357.048.942
Earn-back effect	11,19	967.773.722
VAT Loss	0,51	44.081.161
Net cost	**5,07**	**433.356.382**

Source: Own calculations

5.5.1.7 Other earn-back effects which are difficult to quantify

We remark that there are still other indirect effects to identify. However, we do not take into account these effects in our cost-benefit analysis, either because we do not have the figures, or because they are difficult to quantify in money terms.

First there are **costs linked with older age groups**, who are increasingly using the service voucher scheme. The share of users aged 65 years and above has increased gradually from 25.1% in 2008 to 29.1% in 2016 (WSE figures), with a significant overrepresentation of elderly in the service voucher scheme. In the Idea study (2018) 72% of the users 65+ agrees that they can stay longer at home because of the service voucher scheme. 47% of the 65+ declare that they are physically not able anymore to take up cleaning and household activities, compared

to 27% among all users. The number of "physically" unable is logically increasing with age. Although not the initial objective of the scheme, this evolution suggests that the SVS, together with other facilities/services, supports aged people to live longer autonomously at home. This evolution also implies a substitution of the cheaper service vouchers (to be paid for by the open end budget of Work) for the more expensive traditional residential elderly care (woon-zorg centres [35]) and also the more expensive 'thuiszorg', which is both at the budget of the Minister of Welfare). By means of SVS the household services are relatively cheap for the users so they can stay longer at home[36].

In this spending review we have not researched in depth the earn-back effects of avoiding the cost for the elderly by regular welfare services and the shift in budgets of various services for older persons. To calculate the budgetary effect for the government, one needs to estimate the impact of the SVS on demand for other publicly financed measures and compare the cost for the government (and for the citizens) of the global package of 'home services', (thuiszorg, PWA/wijkwerk; health care, family care, ...) facilitating older persons to remain at home and thus working as a substitute for residential care. Hereby, it is also important to notice that not all of these measures are characterised by an "open end" financing[37], as the SVS is. Therefore we will not include any earn back effects on elderly staying longer at home in the cost benefit model. However using some empirical evidences from a survey of Idea Consult (2018) we can make a rough estimate of the budgetary impact of the shift in demand for the more expensive 'thuiszorg' (paid by the Welfare budget) towards the cheaper SVS (paid by the Work budget).

Following data are relevant:

- 13% of all SVS users [38] in Flanders used "thuiszorg" before they started to use SVS
- 65+ users do use 109 SVS on average on a yearly basis
- 55% of these users have stopped to use "thuiszorg" since they started to use SVS and are estimated to use 109 hours or SV.
- The 45% continuing to combine SVS with "thuiszorg" does this on average for 54,5 hours (half of 109).
- The average cost of "thuiszorg' is 28,2 euro/hour [39](Idea Consult 2018, p.61), which is substantial higher than 15,74 euro/hour in the SVS (figures 2018). The shift in demand from thuiszorg to service vouchers, also triggered by a cap on the annual growth rate of 'thuiszorg', implies a cost reduction for the government, as one hour formal home care (thuiszorg) is on average 28,2 euro/hour which is higher than 15,74euro/hour in the SVS (figures 2018).

[35] According to the Idea 2018 study residential care in Flanders costs on average € 73,34/ a day (a month ca. 2000 euro).

[36] The number of SV workers working for elderly people (767.000*0.27*109/(19*52)= 22.847) is close to the number of "thuiszorg" workers(25.160).

[37] By open end we mean that the spending is not discretionary and therefore directly impacted by demand for the measure. Other measures, such as logistical care services, are characterised by a yearly maximum of hours that are subsidized by the government. Once this maximum is reached, there will be a waiting list.

[38] Figures are calculated as averages fort he total population. Age specific figures may change these estimates.

[39] Idea Consult 2018, on p. ; Idea refers to a publication "Steunpunt Welzijn, Volksgezondheid en Gezin (2013), Financiering van de thuiszorg: het perspectief van de voorzieningen

Based on these figures, we calculate that in total 99.646 (or 77.226 on a full time basis) SVS users have reduced demand for “thuiszorg” and switched to SV. This shift means less demand for more expensive expenditures for the Flemish government because one hour “thuiszorg” is more expensive than one hour SVS. Given that 65 plus do use on average 109 SVS per year, this is a decrease in hours “thuiszorg” of
8 417 621 hours. As the difference in cost/hour between thuiszorg and SVS is 12,46 euro (28,2/hour for thuiszorg and 15,74/hour for SVS) the shift from welfare to SVS result in a decrease in demand for more costly care expenditures, with a net gain of 104 million euro on a yearly basis.

Wrapping up, we estimate that the shift from “thuiszorg” towards less expensive SVS results in a reduction of demand for government expenditures of 104 million euro on a yearly basis. Without the SVS scheme 65 plus would again require more "thuiszorg", which means that demand for Welfare services would rise again, eventually leading to higher public spending. This shift results also in a shift of expenditure between ministerial departments, from Welfare budget towards (cheaper) SVS Work budget, which could raise the issue of co-financing of Welfare for the cost of SVS. The ‘organic’ growing overlap/shift between welfare services (thuiszorg/logistieke hulp) and the SVS and the resulting budgetary effects will increase in the coming years due to further ageing of population.

Table 19 **Estimate of the shift from “thuiszorg” (Welfare budget) to SVS (Work budget), 2018**

Users of SVS 2018 (persons)	766510
rate of user using home care services	0,13
people using home care services	99 646
rate of people stopping to use care services	55%
Number stopping using care services (persons)	54 805
(average) rate of people having reduced their use of home care services	22,5%
people having reduced their use of home care services	22 420
Total of the persons (stop and reduction)	77 226
Average intensity (hours SVS per year)	109*
Hours of care saved (hours)	8 417 621
Cost saving between SV and care (€)	12,46
Total cost saving (€)	104 883 560
Total SV used in Flanders (SV)	86 500 353
Average saving by SV (€)	1,21 per SV

source: Idea Consult iov Federgon, 2018, "De dienstencheques 360° doorgelicht"
*WSE figures 2016: 109 SVS/year for 65 + (average for all users 120),
****totale subsidie/uur thuiszorg 28,2€ o.b.v. Idea Consult iov Federgon (p.; geen onderscheid met logistieke hulp. We kennen momenteel niet de verdeling tussen thuiszorg en logistieke hulp

Another indirect earn back effect is the impact of the service vouchers on the wellbeing for users and for workers. A higher well-being implies less absence from work, less burn-outs, less sickness and health costs. According to the Idea (2018) study the impact on wellbeing of families is substantial (85% of the working users mentioned a better life quality because of the service vouchers; 84% say they have more free time; 79% mention to have less stress).
A final indirect earn back effect, which is difficult to calculate, are macro effects on consumption. More jobs created by the service vouchers, imply more income for citizens and hence more consumption in the economy. And more consumption implies also more income through VAT for the government. On the other hand there might be also a negative effects on labour supply and productivity of the higher taxes which are needed to finance the SV subsidy. Such 'macro effects' are difficult to estimate. Another possible indirect earn back effect is related to the capacity of the SV system to integrate migrant women especially coming from outside EU.

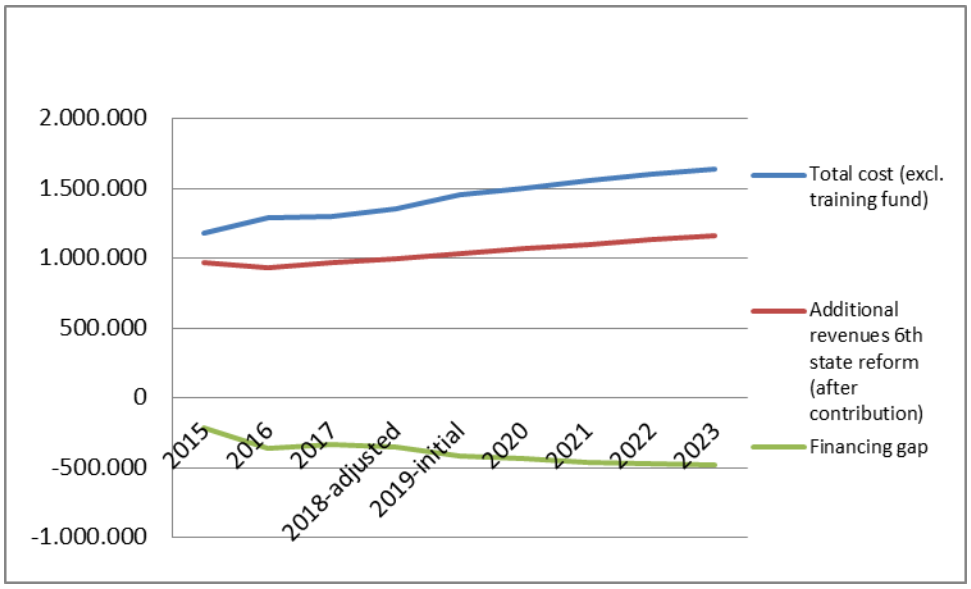
5.5.1.8 The share of the federal government in total costs

So far, we have analyzed the quantifiable costs and earn-back effects on a national level. In the next two sections, we take a closer look at how costs and revenues are divided between different levels, through a budgetary transfer and through asymmetry in the earn-back effects.

Since the transfer of the competence for the SV scheme in 2015 the regions are not only budgetary responsible for the measure, but also entitled to an annual budgetary support from the federal government. We remark that the support is unconditional, not tied to specific regional expenditures such as the subsidies for service vouchers (and thus not linked to the evolution of the system). Moreover, to change this support, a special majority is needed, specifically a two third majority in the federal parliament together with a simple majority in each linguistic group of that parliament. The federal support consists of both a grant (which is linked to the evolution of the CPI and partially to real GDP growth) and a part of the personal income tax revenues. However, the 6th state reform also imposed as a novelty a contribution from the Regions and the Communities to the fiscal consolidation of Entity I and to the ageing cost. Hence the recurrent haircut on the transfer of means to the Regions and Communities and the partial indexation to real GDP growth of the different grants the regions and the communities are entitled to. For Flanders the haircut amounted to 759,7 mio euro (or 7,9% of the transferred competences) in 2015 and was more than doubled in 2016 (1.571,8 mio euro). If we spread this haircut linearly over all new expenditures related to the 6th state reform, we can calculate the annual contribution of the federal government to the SV scheme.

Figure 19 shows that the gap between the costs of the system and the contribution of the federal government is widening over time.

Figure 19 Total cost of the SV scheme in Flanders (in thousand euro)



Source: own calculations

5.5.1.9 Earn-back for the Flemish region

In the previous section, we have calculated the earn-back effects of the SV system on a national level and the unconditional financing of Flanders that resulted from the state reform. In order to estimate the earn-back effect for the Flemish region (on top of the unconditional transfers), we should try to identify which effects affect which government level.

Indeed, as the payment of unemployment benefits and the income from social security contributions are federal social security responsibilities, the savings in these areas that result from higher SV employment do not affect the Flemish budget. On the other hand, as a result of the Sixth State Reform, which entered into force on 1 July 2014, Flanders levies additional **personal income tax**, the so-called 'surcharges', which currently amount to 24,957% of the total income tax paid. As a result, about one fourth of the income taxes paid by Flemish residents, is a direct income for the Flemish government. Based on this percentage, we can calculate a direct Flemish earn-back effect of 22,8 million euro and an indirect earn-back effect of 32,2 million that results from increased employment by the SV users.

Two other earn-back effects for the Flemish region are difficult to quantify and are not taken into account in this exercise. Firstly, there are the Flemish targeted social security reductions, which are estimated at 0,259 euro per SV. We will not take this into account, as Flanders also received an extra income for this competence and reformed the policy over the past years, which makes it difficult to quantify a net effect (if any). Secondly, we could also take into account the (net) contribution of the SV sector to the Belgian GDP. Indeed, the Flemish budget derives resources from the Special Funding Act (regional surcharges, regional and community grants, and other federal allocations) that are (among others) dependent on the (Belgian) GDP growth. As a rule of thumb, ten basepoints of extra GDP result in 30 million extra revenues in

the Flemish budget. However, as the net contribution to GDP by the service voucher sector is difficult to estimate – particularly as black market economic activity is already taken into account in GDP estimations - we do not take this effect into account.

Table 20 shows how the costs and the global earn-back effects are divided between the Flemish and the federal level.

Table 20 Distribution of costs and earn-back

Scenario a

Flanders	per SV	Total
Public support	15,74	1.357.048.942
Earn-back effect	0,64	55.074.127
VAT Loss	0,00	-
Net cost	**15,11**	**1.301.974.815**

Federal	per SV	Total
Public support	0,00	-
Earn-back effect	13,00	1.124.700.464
VAT Loss	0,51	44.081.161
Net cost	**-12,49**	**- 1.080.619.302**

Scenario b

Flanders	per SV	Total
Public support	15,74	1.357.048.942
Earn-back effect	0,45	38.950.922
VAT Loss	0,00	-
Net cost	**15,29**	**1.318.098.020**

Federal	per SV	Total
Public support	0,00	-
Earn-back effect	10,74	928.822.800
VAT Loss	0,51	44.081.161
Net cost	**-10,23**	**- 884.741.639**

Source: Own calculations

We find a strong asymmetry in the earn-back effects of the measure, which are almost entirely federal.

For the federal government it seems that the transfer of the SV scheme was a rewarding strategy : the costs have been reduced as well as their annual growth rate whereas it keeps reaping most of the benefits, i.e. the earn back effects.

5.5.2 Idea Consult study

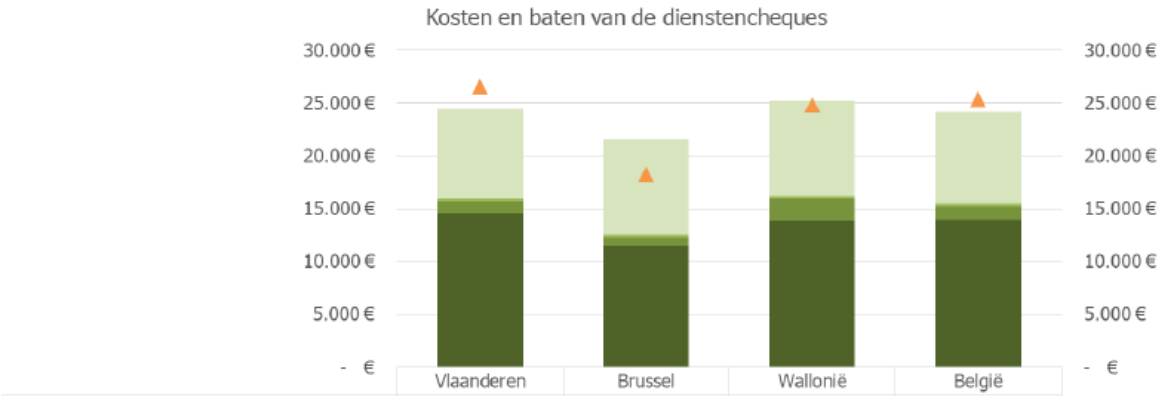
In their 2018 report, commissioned by FEDERGON (the federation of HR-service companies that also includes SV companies), IDEA Consult presented a calculation of the costs and the benefits of the SV system for the society (IDEA Consult, 2018). In the report, the following positive effects were highlighted:

1) Job creation for low- and middle-skilled people
2) Reduction of the black economy
3) Increased labour participation of target groups (women and immigrants)
4) Creation of new companies and activities
5) Higher labour participation and productivity of working-age population thanks to making use of household services
6) Higher and longer autonomy for older people
7) Transfer of household services from care services to the SV system
8) Better welfare through a better work-life balance
9) Welfare and social protection of SV companies

That report calculates the financial impact of 1), 4) and 5) on an FTE basis. For Flanders, the cost of a FTE SV employee (estimated at 26.569 euro) slightly exceeds the quantifiable benefits (estimated at 24.431 euro per FTE). The latter consists mainly of the effect of the creation of jobs, for SV employees (14.566 euro per FTE) and administrative staff (1.146 euro per FTE), followed by the effect of increased labour participation and productivity of the working-age population (8.474 euro per FTE) and the effect of the creation of new companies (245 euro per FTE).

Figure 20 Title

Figuur 59: Kosten en baten van de dienstencheques uitgedrukt in VTE-dienstenchequebanen



	Vlaanderen	Brussel	Wallonië	België
Totaal baten per VTE DCH-werknemer	24.431 €	21.568 €	25.243 €	24.151 €
Hogere participatiegraad en productiviteit van de actieve bevolking	8.474 €	9.034 €	9.015 €	8.684 €
Creatie van ondernemingen	245 €	281 €	230 €	247 €
Creatie van nieuwe jobs voor omkaderings-werknemers	1.146 €	760 €	2.088 €	1.293 €
Creatie van nieuwe jobs voor DCH-werknemers	14.566 €	11.493 €	13.909 €	13.927 €
Kost per VTE DCH werknemer	26.569 €	18.289 €	24.856 €	25.354 €

Bron: IDEA Consult

The report assumes two substitution effects.
First, a substitution effect of 11,4% is used with regards to the service voucher employees. This is derived from the fact that, in a survey among SV users, 13% indicated that prior to using service vouchers, they made use of home care (thuiszorg) and services of Public Centres for Social Welfare (OCMW) or Local Employment Agencies (PWA).

A second substitution effect consists in the fact that, in order to calculate the increased labour participation, only the percentage of the population is taken into account that, prior to making use of service vouchers, did household work him or herself in the own house or in the house of relatives. The IDEA Consult survey indicated that this concerns 35,5% resp. 8,9% (of in total 44,4%) of the Flemish service voucher users(IDEA Consult, 2018).

Comparing the figures and assumptions used by Idea Consult, we find some noteworthy differences with the exercise previously described (see also annex). The most important difference is noticed for the direct earn-back effects with regards to the SV employees, where Idea Consult's estimates are much higher. Differences are mainly explained by the average tax rate used[40], the calculation of social security contributions[41] and the assumption on savings on unemployment benefits[42].

5.5.3 Upcoming Viona study

The Viona study[43] starts from the actual expenditure on service vouchers for the period 2015-2017 and also makes use of a user's survey on the cost drivers in the consumption of service vouchers (use of the black market, work behaviour of users, use of complementary or overlapping welfare services). The Viona model uses a number of different assumptions than the SPR for the direct and indirect earn-back effects, in particular: 1) deduction of the counselling costs for unemployed people from the direct earn-back effects, 2) deduction from the indirect earn-back effects of the budgetary gains related to the substitution of more expensive supplementary home care (logistical cleaning assistance), financed under the Minister of Welfare, into cheaper service vouchers, financed by the Minister of Work (estimated proceeds of 20 million euros in 2017); 3) deduction of medical expenses (based on RVA figures, 5.9% of employees have not worked in the past year due to illness) from the indirect earn-back effects[44] and 4) taking into account the macro effect of an increased consumption of users and businesses as a result of higher labour participation. In contrast to

[40] While we assume an average income tax of 10,6% for the SV employees (who have low wages and mostly work part time), Idea Consult uses OECD estimates for taxes on low incomes of 19,5%.
[41] The calculation of the social security contributions is not, as we do, calculated on the actual number of hours worked (through the number of SV used), but based on the total number of SV jobs (88.334 in 2016) and the average annual wage (13.368 euro)
[42] While we look at the percentage of entrants who are unemployed, correcting for deadweight loss, Idea Consult calculates the lower unemployment benefits on FTE, after correction for substitution and immigrants
[43] Valsamis, D., Mertens, K. en Goffin, K. (2019). De terugverdieneffecten van het dienstencheque-stelsel, VIONA study contract, 25 june 2019, Idea Consult, 80 p.
[44] The SPR takes the indirect costs of illness into account in an indirect way, not as a direct reduction of the payback effects, but as an increase in the wage cost for a company.

the SPR model, the Viona model does not calculate asymmetry between costs and benefits for the various governments. The Viona model calculates the costs and earn-back effects for the global government, while the SPR model quantifies the costs and benefits for the federal and regional governments, including the flows relating to the Special Funding Act (surcharges, federal grant). Lastly, the cost-benefits in the Viona model are expressed per FTE, while the SPR model expresses this per service voucher (which is more convenient for simulations of price alternatives). Both models do not take into account the (substantial) cost of accruing pension rights in the service voucher system. The Viona study also uses the HIVA study (2019), which calculates the net job creation in the system. Viona considers 10% deadweight and displacement effects for job creation in the service voucher system. The SPR uses a baseline of 13% (consolidated figures for Flanders and Wallonia). The earn-back effects of the service voucher system in the Viona and SPR model confirm each other. The global (direct and indirect) earn-back effects, excluding the (indirect) costs, amount to 1,043 million euros in the Viona model (2017). In the SPR model (2019) they amount to 1,179 million euros in the maximum scenario (scenario a) and to 968 million euros in a watered-down version (scenario b).

5.6 Profitability of the sector

5.6.1 Introduction

Service voucher companies are active in an economic sector that is characterised by the absence of price competition as the consumer price is fixed for all consumers and the value of the service voucher is fixed for all companies. In absence of price competition, the cost structure of service voucher companies will almost completely impact their profit margins[45], but not their ability to attract more clients through a normal price mechanism. Moreover, the absence of price competition makes that an increase of the market is likely to be mostly demand driven.

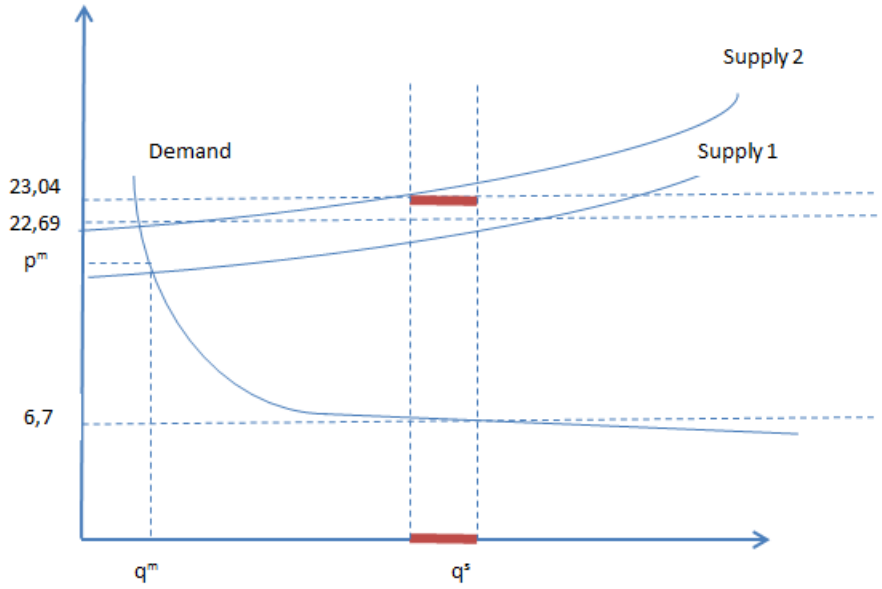
The graphical representation of the SV sector, that was presented in section 5.4, shows that the shape of the supply curve and its position vis-à-vis the service voucher value determines whether demand can be met. While the market is demand driven, producers will only be able to meet all demand as long as the supply curve is (given a specific demand) equal to or below the value of a service voucher. It is possible that supply cannot meet demand due to both increasing production costs and increasing demand.

The first case is possible when production costs increase more than the value of the voucher. This could be represented by an upward shift of the supply curve that is stronger than the upward shift of the service voucher value. Price inflation may cause such an effect: whenever the trigger index number is exceeded, wages increase with 2%, while the value of the service voucher (by law) only increases with 73% of 2%. If the share of wages (and other inflation sensitive input costs) is higher than 73% of the total production cost, the production curve

[45] Except for the possibility to invoice certain administration costs, as we will see further.

nears (or even exceeds) the service voucher value every time the trigger index number is exceeded. In Figure 21 the red line indicates the part of demand that cannot be met by supply if inflation pushes the supply curve above the value of the service voucher.

Figure 21 Increasing production cost

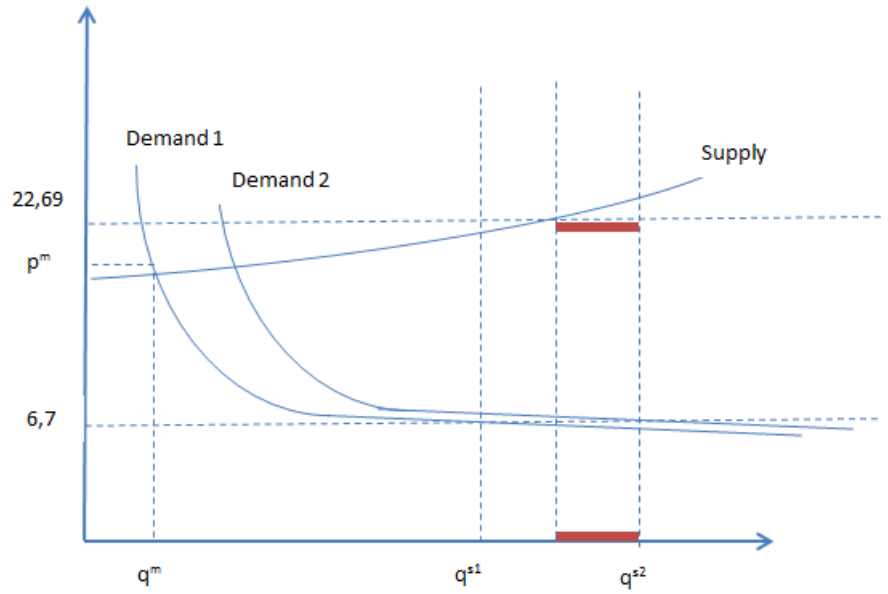


Source: dep FB

In the case of increasing demand (which has consistently been the case over the past years), the ability of SV companies to meet demand depends on the supply elasticity. From

Figure 22 , it can be derived that in case of more inelastic supply, the increase in demand will, at a certain point, no longer be met by supply. Given the important share of the labour cost, it can be expected that supply inelasticity is more likely in periods of economic boom/when labour markets are tight.

Figure 22 Increasing demand



Source: dep FB

In order to understand whether the hourly compensation given to the SV companies suffices to meet (increasing) demand, we would need insight in the sector's supply curve, based on the marginal costs in the sector. Indeed, there are different types of SV organizations, with their own cost structures.

Unfortunately, we do not know the supply curve of the SV sector as a whole (see section 4.4), but we can estimate whether SV companies are sufficiently compensated per hour, by estimating their average production costs and comparing this to their incomes. Next, we estimate the average income and production cost. As the analysis above indicates, in reality, there will be a wide variety in the cost structure of SV companies.

5.6.2 Summary of the result

Table 21 Profit per voucher (figures 2018)

Income	23,09
Production cost	18,85
Gross profit	4,24

Source: own calculations

5.6.3 Income of the SV firms

First we look at the income of the SV firms on an hourly basis. These incomes are indicated in Table 22 and amount to 23,09 euro (23,42 euro for SV purchased as from September 2018) for those companies that invoice administrative costs.

Table 22 Income of the SV companies

Income of the SV companies		23,09
	SV subsidy	13,69
	Invoiced administrative costs	0,4
	Price of the SV	9

Source: own calculations

The direct SV subsidy by the government and the user contribution of 9 euro are the same for each company.

- SV subsidy: In 2018, the public subsidy per service voucher amounted to 13,69 (14,02 euro for SV purchased as from September 2018).

- Price of the SV: as already indicated in chapter 3, since 2014, the price of a single SV was increased to € 9 for the first 400 purchased service vouchers and to 10 € for the next 100 vouchers. Since the regionalization of the system, the purchase price has remained untouched. However, we have had a couple of increases of the government subsidy (and therefore of the total value) because the consumer price index was exceeded.

Some SV firms charge their clients some additional costs.

- Invoiced administrative costs: These administrative costs can take different forms: one-off administrative cost by registration, a yearly fixed cost, a travel cost, extra cost per hour,… Based on an interview of the users of SV by Idea Consult (2018), 15% of the SV firms in Flanders charge their clients some extra costs. The same study indicates that the firms who charge extra costs have a lower profitability (2,7%) than other SV firms (5,3%). It seems that the extra costs are necessary for those firms to survive.

  The 2015 VIONA study (Idea Consult 2015, p. 57) indicates that the average extra compensation per service voucher amounts to 0,66 euro per SV (when an extra compensation is demanded by the SV company, which was the case for almost one quarter of SV companies). An upcoming VIONA study (Idea Consult 2019) finds an administrative compensation per SV of 0,79 euro (based on a user survey) when such a compensation is demanded. Only 14% of the service voucher users reports to pay an extra administrative compensation. This number was doubted by the sector, which indicates that the average administrative cost remains at 0,4 euro per SV.

In our analysis we take into account an extra income of 0,4 euro per SV, but we should take into account that this may vary and that an extra compensation will be borne by the SV user (and therefore it will not directly affect public expenditures).

5.6.4 Production cost

When estimating the production cost, the most important factor will be the average hourly labour cost paid by the SV company, but there are also other costs such as administration costs and training costs.
In Table 23 we estimate every component of the production cost of a SV firm. These estimates are based on several studies, regulations,… and each will be presented in more detail.

Table 23 Estimation of production cost

	Per hour in average	Service voucher
Number of vouchers (refunded)		86.500.353
Production cost		18,85
Hourly labour cost of the service provider employee		17,55
	Loss of time (training, journeys, illnes	17%
	Net wage	9,89
	Normal personal income taxes	1,19
	Normal social security contribution er	0,16
	Reduction	0
	Gross wage	11,24
	Normal social security contribution er	2,81
	Reduction /measures for employment	1,36
	Insurance + 13 month/End-of-Year bor	1,12
	Travel allowance	1,2
Other costs of production		1,30
	Net administration (personal costs, o	1,10
	Training costs	0,04
	Statutory charges and taxes	0,16
Profit		
	Operating result	4,24
	Income company tax	1,25
	Profit	2,99

Source: own calculations

Estimation of every component of the calculation:

Hourly labour costs: 17,55 euro per SV

- Loss of time: Every SV company has costs caused by a loss of time of their employees (for example caused by illness, training,…).We take into account a percentage of 16,9%. Based on the VIONA study in 2015 (Idea Consult, 2015, p. 39) it appears that the average absenteeism in the service voucher sector is 16,2%.
  Moreover, a minimum training time of 12 hours per FTE is foreseen in the collective agreement. If we calculate this 12 hours per year per FTE to a percentage per hour we find 0,7%[46].
- Gross wage: This parameter was calculated taking into account the 2018 minimum wages agreed in the collective agreement for the SV sector[47]. The minimum wages are divided into 4 categories depending on the seniority of the employees (less than 1 year seniority with a minimum wage of 10,82,…). Because we have no further information on the division of the SV employees over the 4 categories, we took the unweighted average of the wages of the 4 categories.

Seniority	**Wage (38h week)**
Less than 1 year	10,82
At least 1 year	11,24
At least 2 years	11,38
At least 3 years	11,50
Average	**11,24**

- Normal social security contribution of the employer: This contribution has changed considerably over the past years because of the tax shift. In 2015 the federal government decided to decrease the wage costs for employers and to increase the net wages of the employees by a few interventions in the tax structure. One of the interventions was to decrease the percentage of the social security contributions for the employers from 33% to 25% in 2018. This will lead to a better profitability for the firms. 25% of the (average) gross wage (11,24 euro) is 2,81 euro.
- Reductions: There are two specific reductions of employer social security contributions which lower the cost of the SV firms by 1,36 euro per SV. On top of this, other wage subsidies lower the cost with another 0,029 euro per SV.
  - First of all there is a structural reduction, determined by the height of the wages (lower wages = greater reduction). For the average salary of a SV employee, this leads to a reduction of 34% of the normal social security contribution by the employer in 2018, or 0,96 euro based on a gross wage of

[46] This 0,7% was calculated by dividing the 12 hours of training by the hours worked by 1 FTE during 1 year, which is 1.748 hours (38 hours * 52 weeks – correction for holidays (10 + 20 days à 7,6 hours per day = 1.976-228). This would be a 0,7% extra 'loss of time'.

[47] We use the minimum wages before indexation in November 2018, as we will later compare these costs with the income before the 2018 indexation of the service vouchers.

11,24 euro. This reduction is limited to employees with a gross monthly wage below €3000.

- Second, there is a targeted reduction for specific categories of employees. For the SV sector this is on average 0,37 euro per hour (of which 0,259 euro Flemish reductions), excl. other measures. The 0,37 euro is calculated by the department of Work (total amount of targeted reductions paid out in the SV sector, divided by the amount of SV = 0,37 euro per SV).

The Idea 2018 study indicates that the change in policy of the targeted reduction (abolishment of the reduction for the long-term unemployed, leaving only Flemish reductions for younger and older 55+ workers[48]) will have an effect on the reductions (decrease), but this is not supported by the calculations of the department of Work (both the reduction amount and the wage cost after social security remained stable). This analysis even shows that, despite an increase of the gross hourly wage with 5,2% in 2015-2018, the gross wage cost (after reductions) only increased with 0,8%:

	Gross hourly wage	Normal social security contribution by the employer	Structural reduction	Targeted reduction	Total Gross wage cost
2015	€ 10,68	€ 3,46	€ 1,16	€ 0,36	€ 12,62
2016	€ 10,77	€ 3,23	€ 1,46	€ 0,34	€ 12,20
2017	€ 11,02	€ 3,31	€ 1,43	€ 0,36	€ 12,54
2018	€ 11,24	€ 2,81	€ 0,96	€ 0,37	€ 12,72

Analysis by the department of Work shows that other Flemish wage subsidies (on top of the social security reductions) to SV companies amount to 0,029 euro per SV.

[48] Policy changes for targeted reduction for specific categories of employees:

- Federal policy up till 30/6/16; from 1/7/2016 Flemish target reductions
- Between 1/7/2016 and 31/12/2018:
  - For younger persons: lowering wage ceiling from 9000 to 7500/Q year 1 and 8100/Q year 2 + limitation of categories (only for low skilled and medium skilled <25 years)
  - For older persons: increase of age from 54 to 55, 62-64 age group: lower reductions for employed persons (zittende werknemers) but no for newly hired (aanwerving);
  - + ACTIVA in uitdoving (supplementary subsidy for unemployed hired by the company)
- From 1/1/2019 on: total exemption of SS contributions for low skilled <25 and for newly hired 55+

- Insurance/13th month/end of the year bonus/holidays: This component was calculated by taking into account an estimation of 10% of the hourly gross wage.
- Travel allowance: The collective agreement foresees an allowance of 0,13 euro per km (car) and 0,23 euro per km (bicycle). In this exercise, a (quite wide) simulation is used in the case of a 6 hour working day (2 shifts of 3 hours at 15 km from home and 10 km between shifts = 40km) and average travel allowance: 40*(0,18/6) = **1,2 euro**. The simulation was also made for only by bike (1,53 euro), or only by car (0,87 euro). So 1,2 euros per hour seems quite large.

Other costs of production: 1,30 euro per SV

- Net administration cost[49]: it is difficult to calculate the administration costs, which include personal costs, office costs, cars and other overhead costs. We can derive that these costs have decreased over time, as the "stricter policy" the IDEA study (2018) describes, refers to SV companies trying to limit their costs by focusing on economies of scale (mergers, enlarging the market,…), centralizing or automatizing some activities (planning, HR, processing the service vouchers,…), stimulating the use of electronic service vouchers, monitoring absenteeism,…In other words, by reducing administration costs. In the analysis above, we have only taken into account the labour cost per SV for administrative staff, as used in the analysis of the earn-back effects and divide this by the number of SV, or 1,3 euro per SV, which is probably an underestimation (see further).

Profit: 4,24 euro per SV

- Operating result: based on the revenue and costs per SV described above, we can calculate an operating result of 4,24.
- Income company tax: The federal tax shift not only has an impact on the social security contributions but also on the income company tax. This shifts from 33.99% to 29.58% in 2018 and to 25.50% in 2020. The baseline assumes the percentage of 29.58%, but in 2020 the profit after tax will increase because of the decreasing tax rate. As a result, the company tax is estimated at 1,25 euro and the profit after tax at 2,99 euro per SV. The Idea 2018 study indicates that the financial profitability of the companies has partly increased in 2015 and 2016 because of a stricter policy by the firms (but also because of the taxshift (1st phase started in April 2016 and fully developed in 2018)). Based on a survey among Federgon members, the study calculated a profitability of 4,6% of revenues, or 1,04 euro per SV in 2016. We estimate that the important difference between this and the 2,99 euro we calculate is mainly explained by an underestimation of administration costs, where we only took into account the wage

[49] On this net administration cost, we apply 15% statutory charges and taxes

of the administrative staff. The gap of 1,95 euro (after tax) is however large and could suggest that more efficiency gains are possible in the administration costs.

(IDEA Consult Study on profitability, 2015)

In 2015, Idea Consult investigated the profitability of the companies in the service voucher system, for the years 2013 and 2014. At that point in time, the system had been characterized by a declining profitability for several years. To be able to compare the different registered companies, the profitability was calculated on the level of one service voucher, as there are big differences in profitability between the different business models (private and non-profit) and between the sizes of the companies.

Based on the annual accounts Idea Consult concluded that the profitability remained rather constant in 2013, compared to 2012, at an average of € 0.36 per service voucher. Preliminary results for 2014 on the other hand, based on a questionnaire with the registered companies, indicated that the profitability declined significantly to €0.04 per service voucher. The companies themselves identify the most important reasons for the declining profitability as: the increasing labor costs, the increasing health costs (illness of employees, work injuries due to the use of 'capital' goods (such as stepladders) supplied by the consumer), an increase in the number of unproductive hours (training, cancellations,…) and the impartial indexation of the reimbursement value of the service vouchers.

In 2013 private companies had the highest profits and non-profit companies were in the majority of the cases making a loss. When looking at the size of the companies, the small ones (less than 20 employees) and the large ones (more than 100 employees) were most likely to be profitable. Medium-sized companies were at risk to make a loss. In total, more than one third of the companies was making a loss in 2013.

For 2014, Idea Consult surveyed companies to calculate the profitability, as the annual accounts were not yet available. Therefore the results are not entirely comparable with 2013, but the preliminary numbers showed a significant decrease in profitability. Different from 2013 was the noticeable decrease in profitability for smaller companies, whereas the larger ones (> 100 employees) maintained their higher level of profitability. This confirms the assumption made by Idea Consult that economies of scale play an important role to reduce costs in the service voucher system, and explains why we see a consolidation movement on the market.

In general, the biggest parameter in the total cost for the companies was the labor costs for the employees, which has been increasing due to seniority of the employees and indexation of the wages. On the other hand, one of the reasons provided by the companies for the decreasing profitability in 2014 was the introduction of the unified employment status, which requires companies to pay their sick employees immediately from the first day of their absence.

The questioned companies indicated that the biggest efforts, they were implementing to increase profitability, were: investing in the quality of work and the education of their employees to reduce the number of sick days, improving the schedules of their employees as to reduce the number of unproductive hours and implementing a stricter policy towards users with regard to cancellations.

However, in 2018, Idea Consult performed another study on the service vouchers scheme. Based on a sample of 29 service voucher companies, of which the financial data were analysed, the average profitability (% margin of gross income) has been increasing over the years from 3% in 2014 till 4,6% in 2016. Expressed in euros per service voucher, this means a profit of 1,04 euro per service voucher in 2016.

5.6.5 Conclusion

We conclude that the profitability of the service voucher firms has increased the last few years because of the tax shift and consolidation in the sector. Meanwhile, the reform of targeted social security reductions does not seem to have impacted the hourly reduction in the sector. In the contrary, in 2015-2018, the gross wage cost (after social security reductions) only increased with 0,8%, while the gross hourly wage increased with 5,2%.

Based on our exercise of the production costs, we still see sufficient profitability for the service voucher firms (possibly hidden in administration costs). As there seems room for further efficiency gains in administration costs before the compensation (by the government or the SV user) for SV companies needs to be increased.
This means that an indexation of 100% as we will describe in policy option 7.4.4 (see further) is not necessary in order to maintain the profitability of the service voucher firms.

6 Evaluation of the service voucher scheme

6.1 Are the 3 objectives met and to what extent?

In this section we report the results of the research on the effects of the service voucher scheme, which issues are raised and to what extent the different objectives of the scheme are met.

6.1.1 Definitions of effectivity and efficiency

Governments want to know the policy impact (effects) of their interventions. How far the objectives have been reached due to government intervention and at which cost (cfr. cost-effectiveness) ?

Governments do want to know the net 'impact' of their measures (*effectiveness*): to which extent the objectives of a policy measure are realized ? And are the effects (outputs) 'purely'

the result of government intervention or also of other factors (influences) (casual relation between policy intervention and social change).
Governments are also interested in the *efficiency of a government intervention.* How can objectives be maximal reached with scarce government means ? Can we do more with less (realize a larger impact with less budget) ? One can look into efficiency as a) the relation between input and output (technical efficiency) and b) cost-effectiveness (relation between effect and budget).

"Means" concern the budget of governments. But also the organisation- and implementation of the measure is important e.g. which model generates the least risks ?
(source: zie Dries Verlet, Bart De Peuter en Valerie Pattyn, Effectiviteit vaststellen binnen de Vlaamse overheid: over willen, kunnen en doen, in: VTOM, nr. 1 2018)
In the next paragraph some studies on effectiveness and efficiency are summarized.

6.1.2 Summary of some studies

Reconciling the balance between work and family life

A first priority of the SV scheme is to balance and reconcile family and work duties by allowing families to buy household related services at a subsidized price. Defining what a reasonable price is, is at the heart of this spending review.

Throughout their (working) life, most people face more than once the challenge to combine employment and care/household responsibilities, especially because two partners working has become the living standard in most countries. Many families are coping with the double burden of employment and household responsibility. According to a survey conducted in Europe by the National Agency for Improving Working Conditions (ANACT) in 2014 50% of the wage-earners feel that they have difficulty completing all the household tasks and are struggling with the life-work balance. Bringing the employment rate to 75% of the population aged 20-64 by 2020 will require that Member States give particular priority to encouraging women to work and improving the overall work-life balance.

Reconciling work and family life has two dimensions: more time for the career and more time for family life. By using service vouchers parts of the household work is taken over by a third party and more free time is obtained. The growth of personal household services depends on the choices households make between "do it myself" and "pay someone else to do it". This decision is based on a trade-off between the monetary cost of paying an outside provider and the opportunity cost, as measured by the net wages of each member of the household (G. Becker, 1965) [50]. A high tax wedge can decrease the opportunity cost and substitute home

[50] G. Becker (1965) developed a family economics theory that assigns a key role to opportunity cost (income derived from an additional hour of work). Becker analyses this decision as based on a trade-off between the monetary cost of paying an outside provider and the opportunity cost, as measured by the net wages of each member of the household. The opportunity cost stems from doing it myself and, consequently, not being available for paid work. If the opportunity cost is

produced services for services supplied by the market, resulting in a less efficient allocation of labour. It is also possible to present the use of service vouchers as a series of choices, where several other variables, in addition to household income and the cost of services, come into play: such as age, level of dependency and changing family structures (Lebrun and , 2016). Price is a crucial parameter, but Orseu (2013) also mention other parameters than price, that enter into the decision-making process of households, such as: cultural barriers/lack of social acceptance of externalizing personal household activities in some countries; difficulties with accepting an unknown person into the home; difficulties in accessing the services (administrative burdens, location, etc.). Furthermore, demand for some activities are more price-elastic than for others, depending on their degree of necessity (for example, studies showed that cleaning is less price-elastic than ironing).

The use of service vouchers has impressively grown in Flanders up till 86 million service vouchers among more than 700.000 users in 2018, reaching one in five households. The growth rate has slowdown but the scheme still attract each year new users. The service voucher scheme proves to have a large acceptability. The relative low buying price (gross 9€/hour household work) and a tax reduction of 2,1 euro for the first 165 vouchers reducing the net price up till 6,8 euro (income 2018/tax year 2019) seems to be a first reason to use service vouchers compared with alternatives in the black market economy. Also the official statute of the service voucher workers and the absence of good alternatives are reasons to use the vouchers (see Idea 2018, p 26) .

The age distribution of the users of the SV scheme shows that the main group, 40% of users, is situated in the age bracket between 30 and 49 years old, which is the active period of life (in the total population 35% between 30 and 49 years, WSE fig 2016). So this indicates that SVS are used to ease the burden of household work when taken up work and family responsibilities. However in recent years, the share of users aged 65 years and above has increased gradually from 25.1% in 2008 to 29.1% in 2016 (WSE figures Idea Consult, 2018, p. 16), with a significant overrepresentation of elderly users in the service voucher scheme[51]. Although not the initial objective of the scheme, these evolutions suggest that the SVS substitutes and/or complements the more traditional elderly care in order to life autonomously at home. First there might be a substitution of the more traditional residential care by SVS [52]. In a recent study of Idea (2018) 72% of the users 65+ agrees that they can stay longer at home because of the SVS. 47% of the 65+ declare that they are physically not able anymore to take up cleaning and household activities, compared to 27% among all users. This substitution we have not looked upon in depth. Second there seems to be a shift in use from

greater than the monetary cost, the decision is made to outsource the production of household services. The use of undeclared work instead of declared work may influence the trade-off insofar as not paying taxes and contributions reduces the cost of the service. In this case, the cost is equal to the net wage of the provider.

[51] This could help balance work life for the children concerned as their parents become less dependent on informal care.

[52] cost for residential care is in Flanders about an average of € 73,34/ a day).

more expensive formal home care services ('thuiszorg'; 'logistieke hulp', budget of Welfare towards cheaper service vouchers (budget of Work) (see section 5.5.1.7). Based on survey data for SVS users, we have simulated a decrease in government subsidies of 104 million euro due to the shift in use from more expensive care (thuiszorg 28,2 euro/hour) towards less expensive SVS (16 euro/hour).

Relative low prices have resulted in a large new market. There was not only substitution for the black market, but also for home production. Because of low prices users replaced home production by SV. The recent study of Vanheukelom commissioned for this SP, which is based on fiscal data, shows there is room for price increases as the demand of higher incomes is price inelastic. However the study also shows that the demand of lower income groups is more responding to price (increases) and hence is more elastic. Descriptive figures underline the distributional effects of such schemes. Low income families can less afford SVS as the share of SV users is significantly rising with income level. This is confirmed by other studies which have argued that the prime users of these kind of schemes are higher dual-income, middle-class families, often with children (Haigner, 2009; Morel 2015) . Only 2.5% of the households in the bottom 20% of the income distribution use service vouchers, whereas 29.3% of the households in the top 20% of the income distribution use them. Households with children are also more likely to use service vouchers compared to households without children (25.3% versus 10.5%). The Idea study of 2018 shows that 23% of the users has a net family income of more than 4000 euro/month compared to 9% among the non-users (p. 13). But this study also finds that the prevalence of use of sv is significant in lower income groups: the share of SV users in the fifth quintile is almost 4 times higher than in the first quintile.

Table: Proportion of households using SV according to income quintiles, Flanders 2015

Income quintiles (based on yearly taxable income)	couples	singles
Bottom 20% Q1	12,4%	1,1
Q2	14,8%	6,4
Q3	17,5%	11,5
Q4	26,7%	10,8
Top 20% Q5	48,0%	19,4

Source: Vanheukelon (2019) based on Statbel (Directorate-general Statistics - Statistics Belgium)

As already mentioned, reconciling work and family life has two dimensions: more time for the career and more time for family life. So a main question is how the extra free time, bought with service vouchers, is used ?

A recent study of Idea (2018) gives evidence for Flanders that SVS facilitate labour market participation and at the same time increase the wellbeing of families.

Effects on labour market participation of the users

According to Idea 2018 study 23% of the working users (or their partner) in Flanders have increased the working hours and 11% would have worked less in the absence of the SVS. On top of that another 7% of the users say that they were able to get back to work thanks to the scheme. On average the users worked 1 extra day a week. On a yearly basis these extra days represent 13.368 extra jobs for Flanders (in Wallonia this would be another 5.460 extra jobs and for Brussels 3.183 extra jobs). These are remarkable high figures[53]. Older reports of Idea for Belgium (2010,2012) showed however a lower effect on the labour participation of the scheme. An ongoing study (Viona Terugverdieneffecten, 2018-2019) will collect evidence on labour supply of service voucher users by measuring with some different batteries of questions. All these estimates are based on stated preferences and possibly biased.

Effects on wellbeing of the users

According to the Idea (2018) study the impact on wellbeing of families is substantial. 85% of the working users mentioned a better life quality because of the SVS; 84% say to have more free time and 81% has a better combination of work and family life. 79% mention to have less stress. There is also more time for the care of children of family members: 62% invests more time in children and 59% in care for a family member.

Job creation for the low skilled

A second important objective of the scheme is raising the employment rate and in particular of low skilled women, migrant persons and other vulnerable groups. Indeed in the last two decades, European welfare states have been struggling to create low-skilled jobs. The European Commission identified personal and household services (PHS) as a strategic economic sector for low-skilled job creation since 1993 (various European publications).

At first sight the scheme has been successful in the sense that for Flanders about 90.000 (in 2016 88.334) service voucher employees are at work in 2018. As a large part is working part time estimates show that this would equal about 50.000 FTE (Idea consult, 2018, p. 97 [54]).

Previous to this spending review there existed for Belgium/Flanders not a single study measuring properly the causal effect of the SV scheme on net job creation. There were a few studies available based on macro-level evidence, suggesting that the service voucher scheme has contributed to increasing the employment rate of low-skilled women[55], but the

[53] The HIVA study (2019) finds zero extra labour supply on the extensive margin for SV users.

[54] According Idea 2018 survey 30% is working between 10-20 hours and 41% between 20 and 30 hours. 28% do have a large part time or full time job (Belgian data).

[55] Raz-Yurovich and Marx (2017) use a difference-in-difference approach, comparing for the period 1999 and 2014 the increase in the employment rate of low-skilled women in Belgium relative to the evolution of the

methodology is not sufficiently credible to establish the causal impact of the scheme. In order to study net employment effects one needs micro-data and a methodology which corrects for several undesired labour market effects such as ise deadweight loss, displacement effects and substitution effects. Deadweight effects, i.e. women that would also be employed in the absence of the scheme, are likely to exist. Indeed, without the SV measure some women might decide to accept a job in other sectors and especially in the private domestic service sector. Another effect are displacement effects, i.e. job loss in companies that compete (in)directly with the domestic service sectors. However the scheme was designed in such a way that it does not compete – at least not directly – with other non-subsidized sectors that already existed at the time of the design of the scheme in 2004. This was one reason why the activities that service employees are allowed to perform is restricted to traditional domestic chores such as cleaning, washing, ironing and food preparation and does not include activities such as e.g. gardening for which a legal market already existed.
Finally also substitution effects might occur, when there is competition between groups of workers, whereas one group gains a job on the cost of the other group. The study does not estimates substitution effects arguing that there are no strong restrictions on the subsidized target group. However we can suspect some substitution effects between the formal "care" sector (thuiszorg) and the SV sector as there exist some overlap in the definition of activities being subsidized (see chapter…) .

The study finds that the baseline for deadweight and displacement effects of the SV scheme amounts to 12,7%. This is the result of the combined effect for low and medium skilled women. If we would look to both groups separately the study finds a net gain in employment of 47% for the low skilled and 52% of the medium-skilled women. However the results come with a large variation around the baseline between 7% and 44%, or a net job creation between 93% and 56%. The 7% is found for Flanders. The 44% is found when including the Brussels region in the regression. The evolution in Brussels is particular and we cannot clearly identify the reasons for this [56]: demand for service vouchers is high, while the employment rate of low and medium-skilled women has decreased since 2004. It is not unlikely that the employment rate were to be lower in the case of no service voucher scheme.

Because of the variation in the results, the study recommends to conduct sensitivity analyses when we calculate earn back effects of the SV scheme.

employment rate of low-skilled men, before and after the implementation of the scheme. They conclude that the employment rate of low-skilled and high-skilled women increased by respectively 5.46 and 2.30 percentage points, while the employment rate of medium-skilled women remained unaltered. The authors warn, however, not to attribute this effect (solely) to the scheme as economic shocks since 2004 might have affected women differently than men, therefore invalidating their identification strategy.

[56] labour market dynamics in Brussels may differ from those in Flanders and Wallonia. The study of Desiere suggests following possible explanations, which can be studied further on. First, the population size is much larger than other 'districts' in the study and might not be comparable to the smaller districts. Second, differences in commuting patterns might influence the labour market dynamics. Commuting to Brussels from Flanders/Wallonia is very common, whereas living in Brussels and working in another district is rather the exception. Third, Brussels' labour market is characterised by an inflow of migrants. It might be the case that migrants attracted to jobs in the service voucher sector end up working and living in Brussels rather than in Flanders or Wallonia.

Fighting against the undeclared economy

Government intervention may also be warranted as part of a drive to deal with undeclared work. Low barriers to entry facilitate undeclared work in this sector: little or no equipment is needed (it is usually provided by the user), and the technical skills required are within almost everyone's grasp. Furthermore, the personal nature of the services may facilitate the use of undeclared employment arrangements. (Lebrun ea., 2016)

The European commission stresses that the lack of a structured and suitable quality supply constrains EU citizens' choices in their private life, particularly with regard to household and care services. They can rely on private supply, but it is quite expensive and not affordable for most of them when no public incentives are in place. That is why, currently, the most popular alternative to the use remains the undeclared economy (see various publications EC).

A 2009 survey showed for Belgium that 40% of the survey respondents knew someone who employed household service suppliers without an official labour contract (Haigner, 2009). The survey also give evidence that small scale unofficial labour market activity is tolerated in Belgium (p; 89).

There exist few studies for Belgium or Flanders about the relation between the black market and the SV scheme [57]. The Idea study (2018) mention that only 8% of all current users (p. 24) has worked with domestic services on the black market before they started to use SVS. We can suspect that in the beginning period of the SV scheme a much larger group has shifted from black market towards the formal SV scheme for domestic activities. This would mean that among the current group of users a substantial part has never had the need to outsource domestic SV activities because either they were doing the household themselves or they even had no household work to be done because they were still living with their parents or in another household situation where another member took up this job (eg. before divorce). In a survey of the European Commission it is shown that in Belgium domestic activities are less taken up by black market (10%) compared to other countries (15% on average in the EU), which is probably an effect of the SVS. However for other activities such as small repairs and renovation in the house the percentage of black work is much higher than in other countries (34% compared to the average of 29% in other European countries). In France, Finland and Sweden, where also subsidies exist for small renovations, repairs and gardening the percentage of black work is lower (about 22%). It would be interesting to have further research on the conditions, the earn back effects but also on the potential risks (competition with the formal sector) and how to deal with in other countries.

[57] Marx (2015) and Pacolet and De Wispelaere (2010) argue that the SVS has a limited impact on the informal sector, but they lack empirical evidences. The studies refer to other studies (mainly Haigner, Jenewein, Schneider, and Wakolbinger, 2010), which are based on very small samples and limited data.

We can find some indication of the evolution of the Belgian national accounts, where a decrease in black market activity can be deviated from the evolution of the composition of household services over time.
In order to estimate the contribution of household services to the Belgian GDP, the National Bank of Belgium estimates the size household services sector, based on a household survey (and hence includes both official and black market services). The table below shows that the share of service voucher activity increased from 14% in 2005 to 71% in 2017:

Table: Share of service voucher activity in total household services production:

2005	14%
2010	60%
2015	72%
2017	71%

This growth led to a decrease of the estimations for the sector and thus indicates a decrease in black market activity. But apart from a substitution from the black market, the service voucher sector also increased interest from families not previously making use of household services.

6.2 Strengths and weaknesses[58]

Strengths and weaknesses of the service voucher scheme

Strengths	Weaknesses
Objectives: are (partly) reached: improved work-life balance in the context of feminisation and ageing of population (incl. increase of work among users); jobcreation for low skilled employees; reduction of undeclared work in the cleaning/ironing sector	**Loss of effectivity and efficiency** through deadweight and substitution effects (cfr. research HIVA 13%; how to reduce ?)
New objectives are met (elderly longer at home; cost for elderly reduced)	**Limited list of activities**, segment of female workers, black economy for a range of other (male)'household' activities still exists (gardening, repairs and renovation in the house, bringing children to and from school,…)
High accessibility: price sv/hour is lower than black market price or other alternatives (formal welfare services; sharing economy); large network of service voucher companies/providers	**Fixed price; fixed amount**; no selectivity according to needs (for some actual price/sv is already to high, for others it is to low); total demand among low income groups is not covered
Quality of non-care activities: professionalisation of services; quality positively evaluated by majority of users	**Labour supply** shortages, new group of workers (migrants/refugees); aging of workers; quality negatively evaluated by minority of users; need for more training; few transparency on quality
Improved quality of jobs: labour- and SS protection through formal statute for the sv workers (sectoral collective bargaining agreements/role social partners); more jobsatisfaction and improved work-life balance also for workers.	**Discrimination** by users, limited respect for the workers by minority of users, image of the sector to be improved
Professionalisation of the market: licence from the government (+quality control before start), large network of service voucher companies	**Limited competition and administrative complexity** (esp. with paper SV, electronic SV not yet optimal; many parties involved; extra operational cost due to state reform)
Trust in the system: high legitimacy; official scheme well known and used by a large share of population. Good practice for other EU countries. Implementation of the scheme is well appreciated by the users.	**Imbalance between costs and earn back effects**: • Between federal and regional governments: earn back effects mainly for federal government while cost is entirely for the regions • Between government departments: earn back effects for Welfare department esp. for elderly, while the cost of sv is for the department of Work

[58] Based upon the SWOT analyses of IDEA2018 p. 68.

6.3 Role of the government: balance between effectiveness and efficiency

In this section we summarise some issues related to the trade-off between efficiency and effectiveness. This analysis is the basis for the formulation of alternative policy options in the next chapter.

The evaluation of the SVS shows that the objectives of the SVS are met to a large extent : families experience an improved work-life balance in the context of feminisation and ageing of population. The scheme has a positive impact on the hours worked of the users and on the time available for the family. The scheme results in a high net job creation for low and medium skilled women and, although evidence here is weaker, we can suspect a reduction of undeclared work in the cleaning/ironing sector.

Nevertheless we can identify several deficiencies of the SVS.

A first deficiency is the low net price level, which is probably too low compared to black market prices. One hour labour is highly subsidized as the cost for the government is 15,7 euro/hour while the user is only paying 6,3 euro/hour (figures 2018), while the absolute maximum level we can find on the black market is around 10 euro/hour (although there are possibly some regional variations which we are not aware of now). The heavily subsidized scheme results in a high (gross) cost of the scheme for the Flemish government. The users do not take into account that such low prices are only possible because of a large intervention of the government, as this has never been clearly communicated. On top of that, the system is administratively complex and there is also a relatively high take up of the service voucher by higher incomes, with probably higher deadweight losses.
Hence the question is how to make the SVS more 'lean' (cheaper) for the Flemish government without losing its main benefits. The cost benefit model show there is some room for price increases, although we should be aware that we would need some social corrections if we want that low income groups also have the option to use these subsidized domestic services as well from the point of view of financial capacity of families (household situation in combination with income) as from the point of view of incentives/disincentives to work for vulnerable groups (see problem of unemployment or inactivity traps)

Therefore in the next chapter we have simulated various alternatives with direct or indirect (through fiscal instruments) price increase options.

Another deficiency is the fixed price (subsidy). The system is designed in such a way that possible efficiency gains of the service voucher companies have no impact on the subsidies of the government and also do not reach the consumers f.e. in the form of lower prices, but end up at the (large) SV companies probably in the form of higher profits.
Next the system is administratively complex. Then there is a relatively high take up of the SV by higher incomes, with probably higher deadweight losses. Finally the cost benefit model show that there exist large earn back effects for the government, but unfortunately these effects are mainly concentrated with the federal government while the increasing costs are entirely for the Flemish government.

7 Policy proposals (taking into account the possible impact on the objectives)

7.1 Introduction

Before discussing different policy options, we outline the expected expenditures in a constant policy scenario.
In this pilot different policy proposals have been discussed. In this section we analyze a series of policy options to reform the Flemish service voucher scheme while linking them to one of the possible types of spending reviews, each having its own goal although the distinction is not always that clear-cut. Depending on the chosen form of spending reviews, policy proposals will be of a different kind.

As far as possible, we try to estimate not only the budgetary effects which result directly from a policy change (e.g. halving tax reduction lowers government expenditures with half), but also the budgetary effect that results from a change in SV use (e.g., as a result from lower tax reduction, SV use may decrease). To this end, we compare with a baseline (no policy change) scenario. As the use of service vouchers can vary in function of target groups, this can affect policy goals. We make use of the template provided by Johannes Hers (see annex).

The proposals can impact both the budget and the policy goals. The policy goals of the service voucher scheme are:

- Supporting the combination of work and household activities, so the users can be active on the labour market.
- The creation of qualitative jobs for vulnerable groups of working age
- To combat undeclared work in the sector of household activities (turn black market into white regular work)

Hence we try to spell out what the possible consequences are of the different proposals on these three policy goals.

Finally, when studying effectiveness and efficiency, as a government we are especially interested in redistributive effects (and the debates on these issues), related to:

- income (low income groups versus middle and high income groups)
- family composition (families with and without children). Household situation in combination with income determines the financial capacity of families.
- incentives/disincentives to work for vulnerable groups (such as migrant workers/refugees)
- age: changing age profile of users, increasing use of 65+ persons. Is a new objective. Who has to pay for this ? (is creating jobs in the SVS, but is not contributing to the first objective combination work/family life)

This sometimes demands further analyses on the data. For example , taking income and family composition into account (deciles based on equivalent household income), tackling

the issue how much of the service voucher budget **before and after policy change** is going to the lower half of income distribution and going to the higher half.

The main purpose of this section is to introduce a framework for future use in spending reviews, by pinpointing the issues to be addressed in a policy proposal (without being exhaustive here in this pilot for every mentioned policy proposal). We also distinguish the tactical or strategical character of a spending review (see section 2).

7.2 Multiannual Estimate

In the multiannual budget, the following assumptions are taken into account:

- Monthly evolution of number of service vouchers, based on DWSE model (and after verification of consistency with earlier evolutions or estimates)
- Yearly evolution of administration cost, based on DWSE estimate
- Constant penalty by the service provider
- Constant budget for training
- Number of SV invoiced but not used increases in line with number of vouchers acquired
- Monthly evolution of price, based on inflation estimates by the Federal Planning Bureau[59]:

Expected exceeding trigger index number	Subsidy	price increase valid for purchases as from	valid for paid invoices as from
may/17	13,69	jun/17	sep/17
aug/18	14,02	sep/18	dec/18
jun/19	14,36	jul/19	oct/19
oct/20	14,70	nov/20	feb/21
dec/21	15,04	jan/22	apr/22
march/23	15,39	apr/23	jul/23

- Tax expenditure increases in line with number of vouchers acquired in the previous year
- Constant direct revenue

The forecast of the number of purchased service vouchers by the department of Work as described in section 4.1 is used to calculate the cost of the service voucher system in the Flemish budget (at least twice a year, initial and adjustment) and in the multiannual budget (at least once a year).

[59] Parameters used in the 2019-2024 multiannual budget of November 2018.

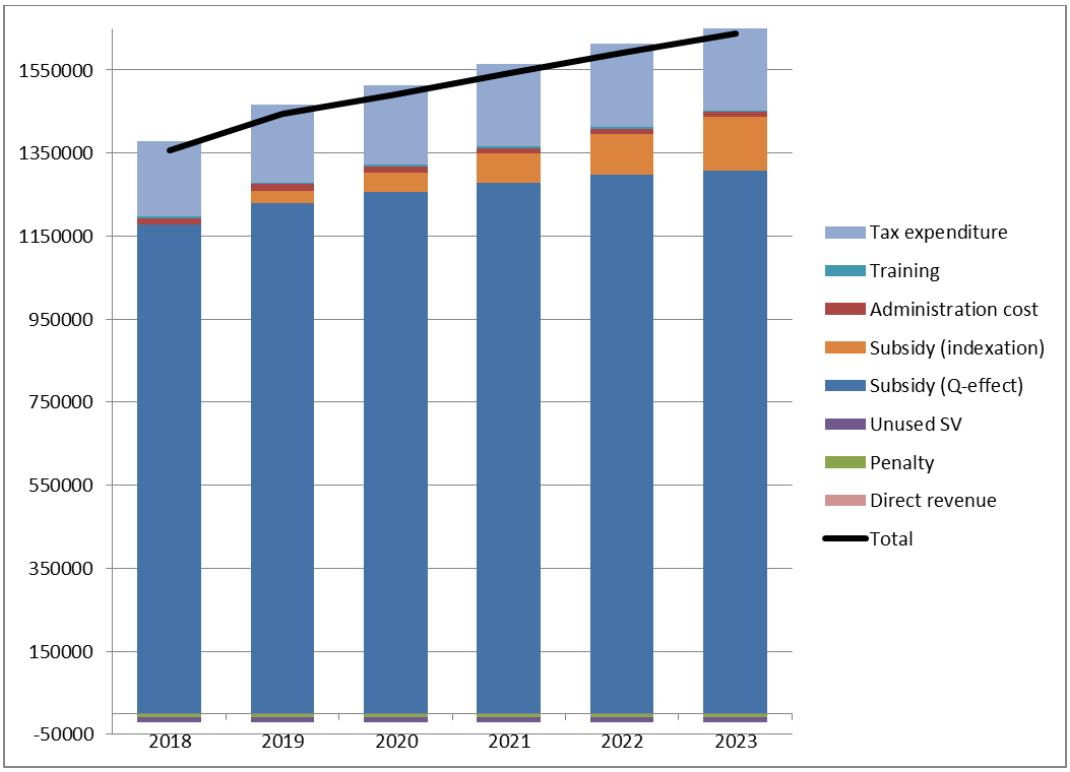
Table 24 presents the different components of the budgetary cost, as used in the adjusted budget 2018, the initial budget 2019 and the 2019-2024 multiannual budget:

Table 24 Baseline expenditure

in k euro	2018-adjusted	2019-initial	2020	2021	2022	2023
Direct expenditure	**1.176.965**	**1.263.509**	**1.310.590**	**1.361.635**	**1.405.804**	**1.439.759**
Subsidy (Q-effect)	1.177.735	1.226.846	1.251.297	1.273.815	1.290.931	1.299.589
Administration cost	14.979	15.703	14.465	13.215	12.093	12.157
Penalty	-7.149	-7.485	-7.485	-7.485	-7.485	-7.485
Unused SV	-12.939	-12.612	-12.863	-13.095	-13.271	-13.360
Training	4.339	4.339	4.339	4.339	4.339	4.339
Subsidy (indexation)	0	36.718	60.837	90.846	119.196	144.519
Tax expenditure	**181.084**	**192.641**	**198.721**	**202.910**	**205.895**	**207.979**
Direct revenue	**-1.000**	**-1.000**	**-1.000**	**-1.000**	**-1.000**	**-1.000**
Total	**1.357.049**	**1.455.150**	**1.508.312**	**1.563.544**	**1.610.699**	**1.646.738**

Source: Department of Finance and Budget

Figure 23 Baseline expenditure



Source: Department of Finance and Budget

7.3 Tactical approach

7.3.1 Unique fiscal reduction limit for singles and couples: 200

Description of the policy measure

In tax year 2018 a 30% tax reduction was in place up to 1.440 euro or 160 vouchers per SV user (this maximum amount is indexed). Hereby no distinction is made between singles or couples. In other words, a couple can, through fiscal optimisation[60], buy 320 SV per year at 6,7 euro (after tax reduction), whereas a single can only buy 160 SV per year.

It can be questioned whether this distinction is fair, particularly as singles who are working and have children may have a higher need for service vouchers. As described in annex, 34,7% (or 15.203 people) of the singles with children who use SV currently already used near the maximum per year (>1.300 declared). This group also represents 30,04% of the singles who declared more than 1.300 euro per year (15.203/50.608). 35,06 % (13.714 singles) of the working singles with children declare more than 1.300 euro per year.
We therefore simulate the effect of introducing a single limit for service voucher expenses for both singles and (fiscal) couples, to 200 SV and 250 SV per year.

Effects on gross and net public costs

Making abstraction of behavioural effects, the number of affected *couples* can be calculated. Indeed, the couples who are currently (tax year 2017) declaring more than 1800 or 2250 euro can be identified, as well as their current spending. By lowering the maximum declarable amount to 2250 euro (250 SV) per couple, 21.491 couples would be affected, whose declarations would fall by on average 460,33 euro. By lowering the maximum declarable amount to 1800 euro (200 SV) per couple, 31.674 couples would be affected, whose declarations would fall by on average 697,47 euro. Taking into account that the tax reduction amounts to 30% of the declared amount, this would result in a decrease of fiscal expenditures with 2,97, resp. 6,63 million euro for the government.
The number of affected *singles* can only be estimated, as we do not have (IPCAL) information for Flanders on the distribution of people who currently purchase more service vouchers than the maximum. By applying the share of singles on purchase data, it is estimated that, as a result of higher maximum declarable number of vouchers to 200, 40.154 singles would increase their declarations for an average of 210,19 euro per user. When increasing the maximum declarable number of vouchers to 250, 40.154 singles would increase their declarations for an average of 232,16 euro per user. Taking into account that the tax reduction amounts to 30% of the declared amount, this would result in an increase of fiscal expenditures with 2,53 , resp. 2,80 million euro for the government.

As a whole, the change of the maximum declarable number of service vouchers to 200 or 250 per family (single or couple), would increase government expenditures only slightly, with 4,10 resp. 0,17million euro, in absence of behavioural effects.

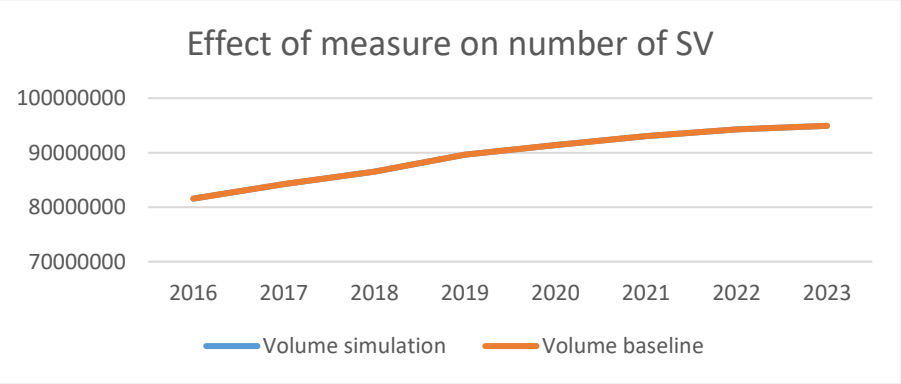
By applying the distribution of the use of service vouchers in Wallonia (which is not capped), it is estimated that, as a result of a higher maximum of declarable vouchers to 200, 42.254 singles would increase their declarations by an average amount of 386,66 euro per user. When increasing the maximum to 250 vouchers per users, 42.254 singles would increase their declared amount by an average of 734,24 euro per user. This would result in an increase of fiscal expenditures with 4,90, resp. 9,31 million euro for the government.

[60] This is valid for fiscal couples of which each partner buys 155 service vouchers.

As a whole, the change of the maximum declarable amount of service vouchers to 200 or 250 per household, would lead to a change in government expenditures by an increase of 1,73, resp. decrease of 6,34 million euro.

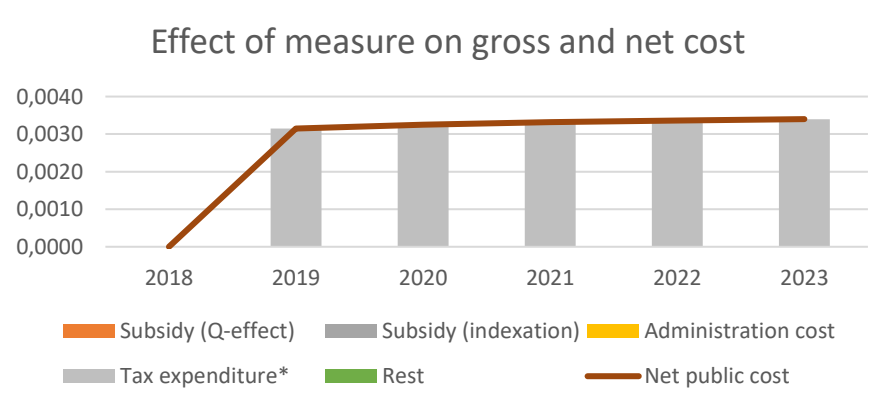
Indeed, in these calculations no behavioural effect is taken into account yet. However, we can assume that singles currently purchasing around or above the maximum yearly threshold, may increase their SV use, while couples whose declarations exceed the new limit, may now decide to purchase less SV as a result of the increased marginal cost. As we do not know elasticities in function of the amounts purchased or declared, we estimate the behavioural effect by applying the average elasticities described in section 5.2. for singles and couples on the estimated singles currently purchasing 1300-1800/2250 euro and on the couples currently purchasing 2800-1800/2250 euro.

Figure 24 Effect on the number of SV



Source: own calculations

Figure 25 Effect on the costs



Source: own calculations

Effects on policy goals

Combating undeclared work: as long the (net) consumer price remains lower than the price in the underground economy (10 euro), there will be no substitution effects.

Integrating high-risk unemployment: depends on 'net' behavioural effects

Improving work-life balance:

- Effect on "winning singles"?
- Analysis "losing couples":

The reduction of the maximum declarable number of vouchers for couples to 200 (250), would affect 31.674 (21.491) out of 240.732 fiscal couples, of which

- 21.271 (14.534) are households with children, out of 90.588 users, or 23,5 (16,0)%
- 4.922 (3.546) are estimated to be working, out of 96.729 users, or 5,1% (3,7)%
- 1.832 (1.365) are estimated to be working couples with children, out of 75.848 users, or 2,42 (1,8)%
- 4.953 (3.324) are estimated to have at least one partner who is retired, out of 115.964, or 4,3 (2,9)%

The increase of the maximum declarable number of vouchers for singles to 200 or 250, estimated by the distribution in Wallonia, would affect 44.064 singles out of 196.475 fiscal singles, of which

- 12.8877 are households with children, out of 43.755, or 29,5%
- 28.351 are working singles, out of 123.149 singles, or 23,0%
- 7.035 are working singles with children, out of 39.113 singles, or 18,0%
- 9.782 are retired singles, out of 53.383 singles, or 18,3%

Implementation of the policy measure

From a legal point of view, this policy option risks discriminating married and legal couples versus actual couples living together (but are not a legal couple). Indeed, the latter group will still be able to benefit form a tax reduction for two times the amount of married and legal couples. It remains to be seen whether this discrimination is legally acceptable. The Constitutional Court states that a different treatment of the three different relations (married, legal and actual couples) can be justified by the goal of the measure (Arrest nr. 177/2018 van 6 december 2018, randnr. B.6.2.). It should however be said that, so far, policy is favouring strengthening the rights (and obligations) of married and legal couples, rather than actual couples. Also, the European Court of Justice judged that the different treatment of dependent children is contrary to the principle of equality.

The technical implementation should be discussed with the federal Ministry of Finance.

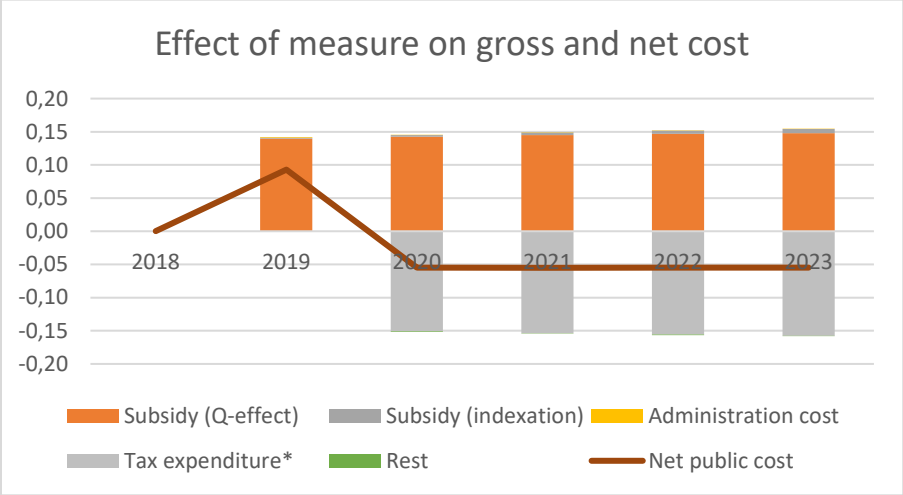
7.3.2 Lowering of the voucher price to 8 euro while increasing (but freezing afterwards) the subsidy to the SV companies with an equivalent amount

Description of the policy measure

The government subsidizes the usage of service vouchers in two different ways. A direct subsidy to the producers to lower the consumer price and a tax reduction in the personal income tax. It is possible to raise the direct subsidy to decrease the consumer price from 9 to 8 euros and in order to make this policy option budget neutral, decrease the tax reduction from 30% to 7% in the personal income tax.

Effects on gross and net public costs

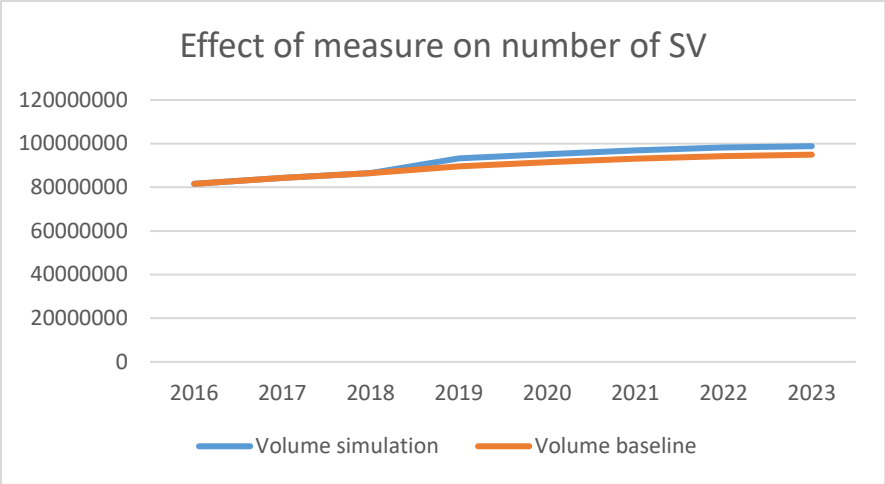
This policy option is by construction budget neutral. In the first year of the policy the effect on the public costs will be positive. This is because in the first year, the higher direct subsidy is already in place but the old tax reduction, from the previous tax year, is still in place. After the first year, the costs will decline to almost zero.



Source: own calculations

The policy option will only slightly increase[61] the number of service vouchers purchased.

[61]There is an increase in volume and at the same time net savings are generated as a result of the difference in the elasticities for price and tax subsidy.



Source: own calculations

Implementation of the policy measure

A general lowering of the tax reduction does not seem to imply any legal complications. In both the Walloon and Brussels region, a similar policy change was executed.

7.3.3 Organizational design/reduction of administrative costs

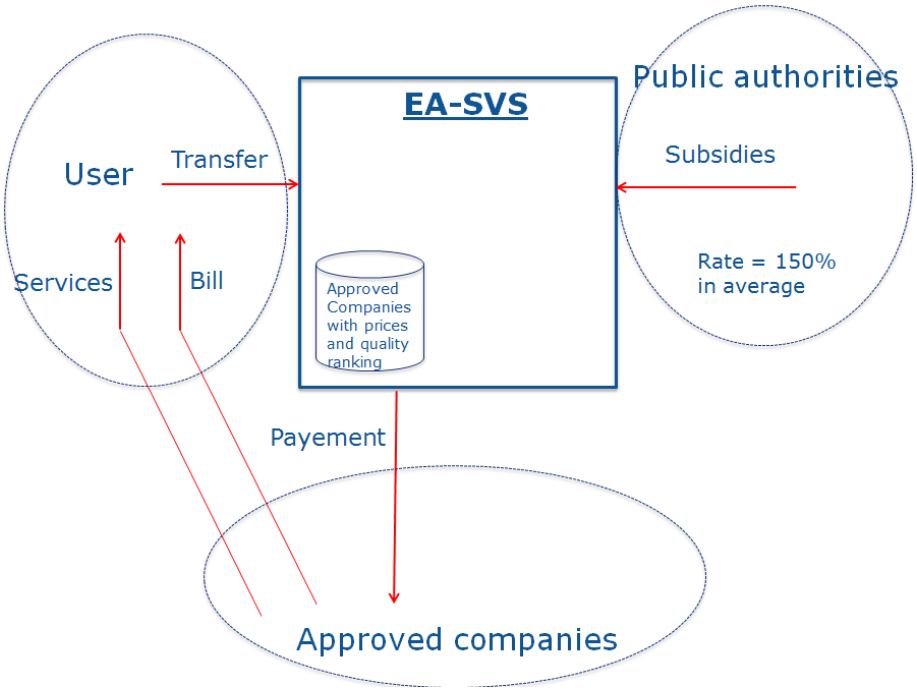
One of the parameters of the cost of the Service Voucher system that can be adapted is the administration cost. In the current system the issuing company is responsible for issuing the vouchers and managing the operational side of the service voucher system, for which the Flemish government pays an administration cost.
Currently, 65%[62] of the issued vouchers are electronic vouchers. The cost of managing electronic vouchers is substantially lower than that of the paper ones. Based on the current and previous contracts with the issuing company, we estimate the price difference between electronic and paper vouchers to be 30%. By only allowing users to buy electronic vouchers, the administration cost could be significantly reduced.[63]

Another policy option could be the introduction of an electronic account minimizing the administrative costs while offering more flexibility and transparency.
Figure 26 summarizes the system of an electronic account. Each household has the possibility to open an electronic account (EA) dedicated to service voucher services. Periodically according to the household consumption of services, the household transfers money to this account. Automatically, the public authorities give a subsidy, in average 150% of the amount spent by the household. With this account, the household pays the bill received by the approved companies. The EA-SVS is a web enabled application. The prices are free and visible.

[62] End of April 2019
[63] If we assume that in the contract for 2016-2018 all the issued vouchers were electronic, this would have lowered the administration cost with €6,8 mln. for 2016-2017 and with €3,37 mln. for 2018. This is an overestimation of the savings that could be made by making the system 100% digital, as the issuing company has set their prices based on a dual system and a 100% digital system would create other costs that are not taken into account now.

The households know the real price and the public support. There will be more information on prices and quality (data available with the price and quality ranking). The level of subsidy (the 150%) could be function of different characteristics of the user (income, activity, age,…). The EA-SVS could be a interfederal tool with each region determining the level of subsidy. It would also be possible for a consumer to have several "sub – EA-SVS", for example one for cleaning with 150%, one for gardening and small repairs with 100% subsidy and one for care services with a subsidy depending of several factors. The communication strategy should underline the level of the public support which could be 150%. To be an “approved” company, you must follow several rules (as today). Remark that during the first year of the EA-SVS, there is an additional cost: the fiscal reductions to which one is entitled because of the service voucher bought in the previous year.

Figure 26 Making use of an electronic account



Source: Lebrun (2019)

7.4 Strategic approach

In the so-called strategic approach the goal of a spending reviews is to sharpen policy prioritisation and clarify responsibilities.

7.4.1 tax expenditures: tariff of 10%, with or without social correction

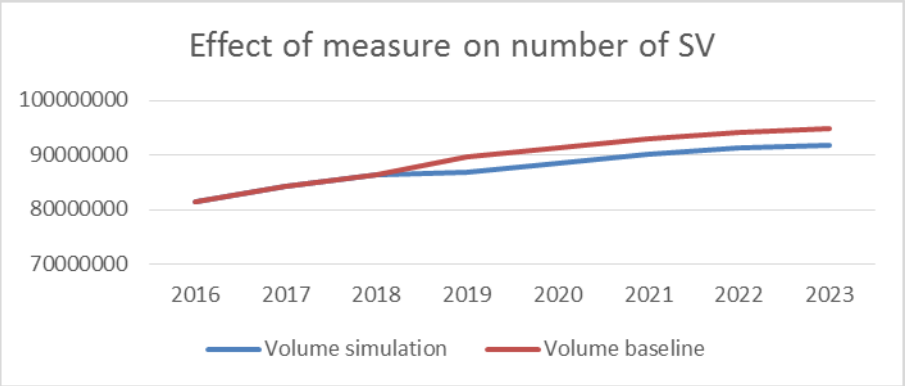
Description of the policy measure

Similar to Wallonia, the current tax reduction of 30% could be reduced to 10%.
The social correction could consist of a tax rate of 15% e.g. for lower incomes from professional activities, alternatively one could have a PIT reduction for these incomes, with the same budgetary cost as the 15% reduction for the lower incomes.

Effects on gross and net public costs

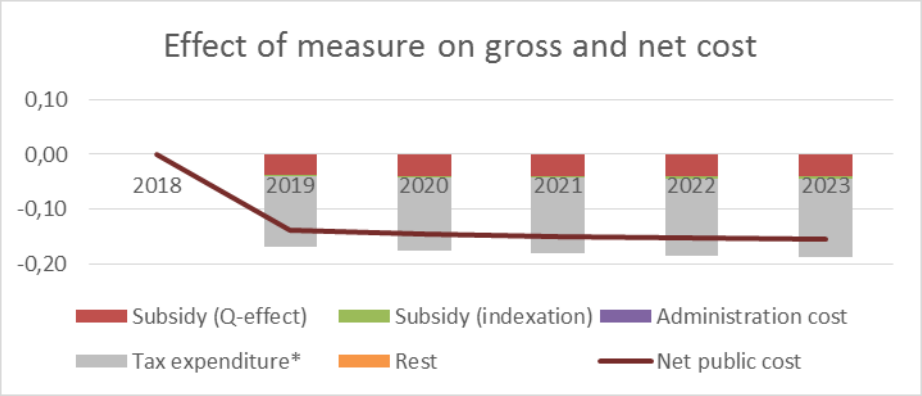
The measure has a direct budgetary effect (as tax expenditures per SV are 2/3 lower (from 2,7 euro to 0,9 euro per declared SV) and an indirect budgetary effect as SV users will adapt their consumption as a result of a higher net cost.

Using the (total) elasticity of -0,18 as estimated by Vanheukelom (2019, see also section 5.2) based on the Walloon reduction of the tax reduction, the growth in SV use is expected to slow down, implying 3 million lower use of SV than in the baseline scenario.



Source: own calculations

When combining both effects, we find a gross saving (compared to the baseline scenario) of 166 million as from the first year, up to 183 million by 2023 (net savings from 137 to 153 mio).



Source: own calculations

Effects on policy goals

Vanheukelom (2018) estimates both the change in SV users (extensive margin) and the change in average use per SV user (intensive margin) that results from a reduction in tax reduction from 30 to 10%. It is found that, while the global average change in users is limited (-0,5% for singles, 1% for couples), it are mostly lower income groups with children that will stop using SV. The average use is cut back more by younger people (-4,8% among 31-40 year old singles, -5,7% for couples) than by older people, who do not reduce their average consumption.

We therefore can estimate that this measure affects the policy goals as follows

- Combating undeclared work: SV demand, and hence employment, is 3% lower than in the baseline scenario. That is a negative demand effect because **as long the (net) consumer price remains lower than the price in the underground economy (10 euro), there will be no substitution effects.**

- Integrating high-risk unemployment: slightly (SV demand, and hence employment, is 3% lower than in the baseline scenario)

- Improving work-life balance: moderate (It seems that the impact on use is the strongest for working people with children, who might need SV assistance the most to improve work-life balance)

Implementation of the policy measure
[what is the first moment this measure can be implemented, practical and legal requirements]

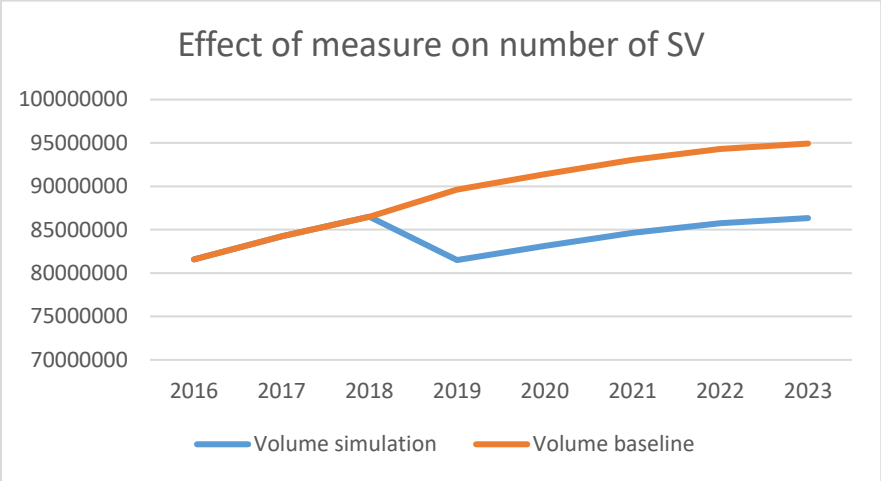
7.4.2 Increase voucher price from 9 to 10 euro or number of SV or combination of both

Description of the policy measure

Effects on gross and net public costs

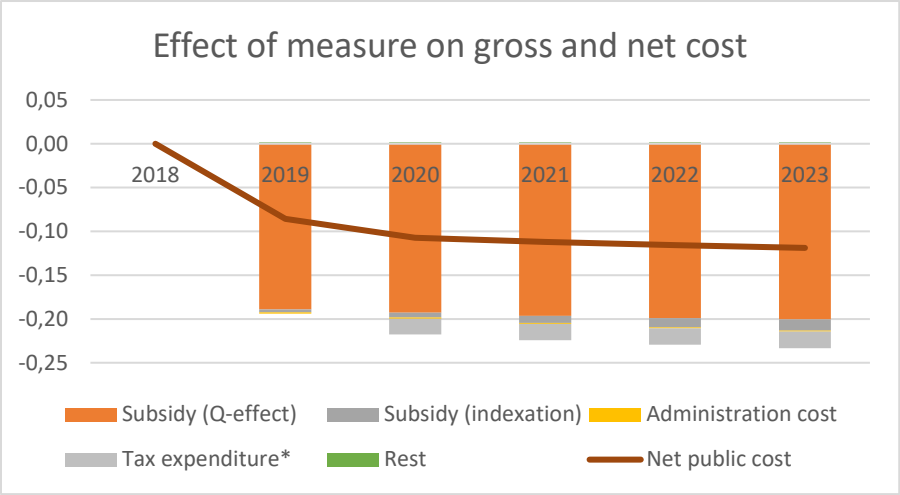
The measure has a direct budgetary effect (as the subsidy per SV is 7,3% lower (from 13,69 to 12,69 euro per SV) and an indirect budgetary effect as SV users will adapt their consumption as a result of a higher cost.

Using the (preliminary) elasticity of -0,85, the use of SV use is expected to fall by 8,1 million in the year of implementation (2019), compared with the baseline scenario.



Source: own calculations

When combining both effects, we find a gross saving (compared to the baseline scenario) of 192 million as from the first year, up to 232 million by 2023 (net savings from 86 to 119 mio).



Source: own calculations

Effects on policy goals

Combating undeclared work
Integrating high-risk unemployment
Improving work-life balance

Distributional effects

Other effects
[eg employment effects]

Implementation of the policy measure
[what is the first moment this measure can be implemented, practical and legal requirements]

7.4.3 Progressive consumer prices: 9 euro till 125, 10 euro 126-250, (equivalent lower subsidy for firms)

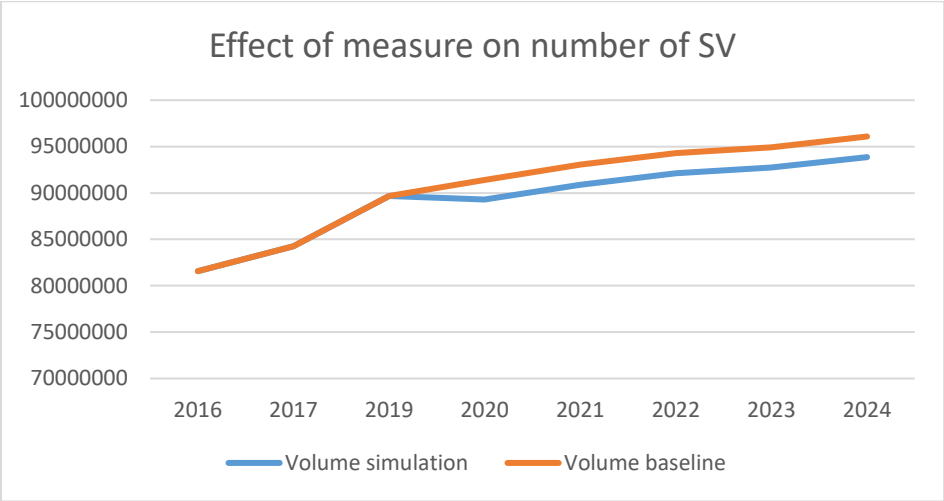
Description of the policy measure

Instead of increasing all prices from 9 to 10 euros, it is also possible to increase only the price of the service vouchers purchased above the amount of 125 vouchers. This would only affect those who consume above 125 vouchers.

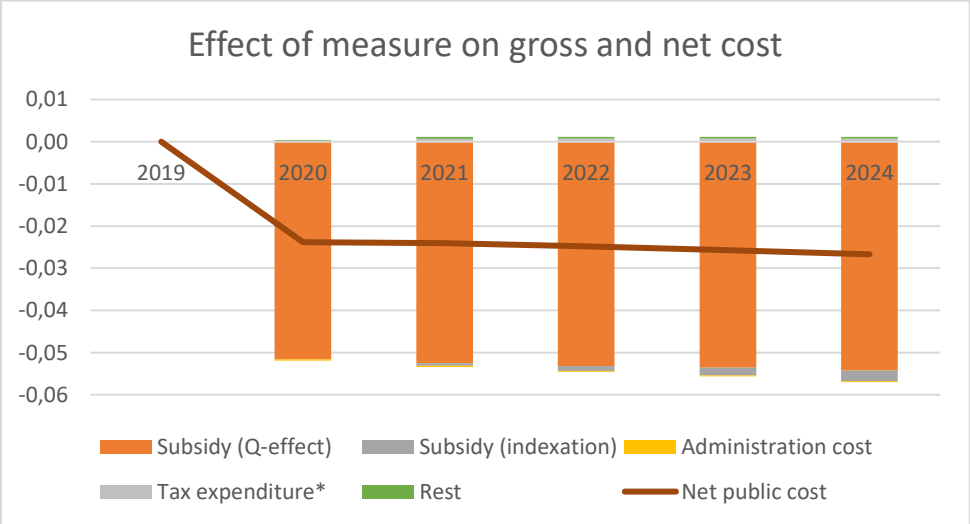
Effects on gross and net public costs

The analysis in done on data on the purchased amount of service vouchers in 2017. By using the price elasticity of -0,85, it is computed what the change in purchased amount would be from those who purchase above 125 vouchers.

The higher price will decrease the number of service vouchers bought. This will lead to effects on the budget.



Source: own calculations



Source: own calculations

This policy option will decline net public costs by 0,02 (in 2020) to 0,030 (in 2024) billion euros.

Effects on policy goals

Combating undeclared work:

Integrating high-risk unemployment:

Improving work-life balance:

Distributional effects

Other effects

[eg employment effects]

Implementation of the policy measure

[what is the first moment this measure can be implemented, practical and legal requirements]

7.4.4 indexation costs also borne by consumers

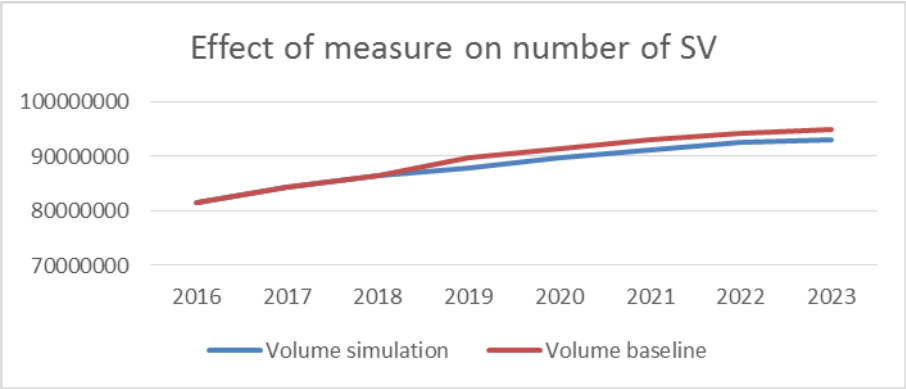
Description of the policy measure

The proposal is to share future indexation equally between government and user contribution (currently the (73%) indexation is only paid for by the government) . One possibility is a 100% indexation, the cost of which equally borne between users and government.
Remark that the SV companies have been asking for quite a while this 100% indexation but the profitability of the companies has been enhanced by reductions in some taxes.

Effects on gross and net public costs[64]

The measure has a direct future budgetary effect (as future price increases as a result of indexation of the subsidy per SV are no longer solely borne by the government, put partially (50%) by the consumer) and an indirect budgetary effect as SV users will adapt their consumption as a result of a gradually increasing.

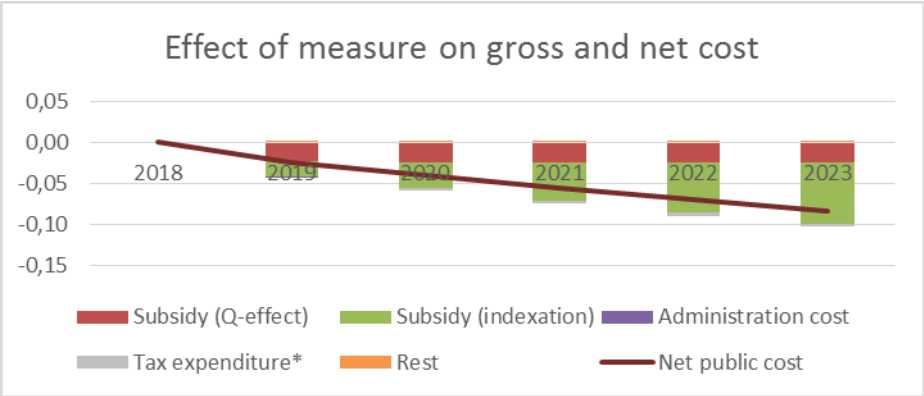
Using the (preliminary) elasticity of -0,85, the use of SV use is expected to fall by 1,7 million in the year of implementation (2019), compared with the baseline scenario.



Source: own calculations

When combining both direct and indirect effects, we find a gross saving (compared to the baseline scenario) of 42 million as from the first year, up to 103 million by 2023 (net savings from 24 to 83 mio).

[64] This implies the effect of continuation of current indexation (73%) but from now on shared in equal terms by the government and the consumers.



Source: own calculations

Alternatively, private and public share in (current) indexation could be equal to their share in the current contribution.

The measure has a direct future budgetary effect (as future price increases as a result of indexation of the subsidy per SV are no longer solely born by the government, put partially by the consumer) and an indirect budgetary effect as SV users will adapt their consumption as a result of a gradually increasing.

Using the (preliminary) elasticity of -0,85, the use of SV use is expected to fall by 2,1 million in the year of implementation (2019), compared with the baseline scenario.

When combining both effects, we find a gross saving (compared to the baseline scenario) of 51 million as from the first year, up to 124 million by 2023 (net savings from 24 to 94 mio).

Other policy proposals can be envisaged in a strategic approach such as an Upper bound of 160 SV for both singles and fiscal households, a tariff of 0% for tax expenditures, with or without social correction (tax rate of 15% eg for lower incomes from professional activities, alternative: PIT reduction for these incomes, with the same budgetary cost as the 15% reduction for the lower incomes or increasing the Increase purchasing price for SV >250 (currently 400 SV at 9€).

7.5 Strengthening qualitative labour supply to the service voucher sector

An evaluation of the Department of Work and Social economy (only available in Dutch https://www.werk.be/cijfers-en-onderzoek/rapporten/de-afschaffing-van-de-60-regel-bij-de-dienstenchequebedrijven-0) showed that the sector of service vouchers is actually confronted with labour shortages. Indications are:
The matching between vacancies and the potential labour supply of the unemployed has grown more tense. While the demand in terms of number of vacancies in the service sector has risen strongly between 2016-2017 with +30%, the number of available unemployed for

each vacancy has dropped down to 3,9 (however with large regional variation). More vacancies also stay 'open' for longer periods.

- The pool of officially unemployed, who are able and willing to take up this kind of service jobs, seem to "dry up". The share of workers who enter the service voucher scheme and are on unemployment or other benefit has significantly decreased (34% in 2014 to 23% in 2016), while the group coming from 'another' job has increased (35,6% in 2014 to 39,3% in 2016), and especially the group coming from inactivity (neither in work or on benefit) has increased substantially (27,4% in 2014 to 33,6% in 2016).
- Among these 'inactive' persons most of them are coming from EU-countries (east-Europe), but the group who is most on the rise is coming from out the EU [65]. We actually do not know if these person are born abroad and enter the service voucher scheme as a first job or if it concerns third or fourth generations of migrants. There had been a debate in Belgium with arguments that first priority to fulfil the open vacancies should go to the (long term)unemployed living in Belgium and not to inactive persons coming (or even being 'imported') from abroad.

Following policy options can contribute to a better matching between demand and supply:

- Investments in qualitative screening of competences and searching behavior of unemployed and of the inactives (role of partner organizations)
- More investments in training and on the job training (needs change in legislation). Specific attention not only to technical competences, but to language and soft skills (work attitudes, self-organization,..)
- Investments in working conditions (ageing of workers), workability.
-

7.6 Broadening the scope of the activities (not to be simulated)

The list of activities is actually limited to (female) cleaning, washing, ironing and food preparation. In order to attract more (low skilled) man, which will also upgrade the sector and contribute to a more positive image building, the list of activities could be enlarged with activities such as small repairs and renovations in the house, gardening, collecting and bring kids to school, …

Risks

- Higher direct budgetary effects
- Deadweight and displacement effects: The SV scheme was designed in such a way that it does not compete – at least not directly – with other non-subsidized sectors that already existed at the time of the design of the scheme in 2004. This was one reason why the activities that service employees are allowed to perform is restricted to traditional domestic chores such as cleaning, washing, ironing and food preparation and does not include activities such as gardening for which a legal market already existed. The option to broaden the scope with activities such as entails a risk for displacement effects, i.e. job loss in companies that compete (in)directly with the domestic service sectors.

65

Opportunity:
A survey of the EC (see Idea 2018), gives evidence that in Belgium there is less black work for cleaning activities (10%) than on average in the EC (15%). However for renovation and repair activities in the house the percentage black work is in Belgium higher (34%) compared to the European average (29%). In France, Finland and Sweden , where subsidies can also be used for renovation and repair activities at home the share of black work is lower (22%). Such measures can generate earn back effects for the government. But as displacement and deadweight loss is in all likelihood larger than for current SV sector, and the subsidies needed per voucher are probably (a lot) higher, resulting in a worse cost-benefit ratio from a public policy perspective.

8 Lessons learned and future research

The data and the analyses based upon these data have revealed some surprising results and insights. First, the elderly have become the most important client group of the service voucher companies while the expenditures on SV do not increase linearly with income. Then the deadweight and displacement effects of the SV scheme are rather limited. On top of that, employment in the SV sector is almost exclusively female and part-time.
Next, the profitability of the service voucher firms has increased the last few years because of the tax shift and consolidation in the sector. Moreover, despite or thanks to the reform of targeted social security reductions the gross wage cost (after social security reductions) only increased with 0,8% in 2015-2018 while the gross hourly wage increased with 5,2%.
Finally, a DID analysis has shown that the elasticity of the demand for service vouchers with respect to the tax advantages is rather small.

Given these results and insights, we should enhance evidence based policy by systematically introducing spending reviews in the budget and policy cycle of our governments. This also requires that policy advisers get the time and resources to be able to participate in a spending review. The proposals of the strategic approach have been very useful in drafting the multi-annual budget of the new government.
A direct follow-up of this spending review is a deeper analysis of the indirect earn-back effects related to the substitution of more expensive supplementary home care (logistical cleaning assistance), financed under the Minister of Welfare, into cheaper service vouchers. In the same vein, the innovative proposal to reduce administrative costs by introducing an electronic account deserves to be further elaborated by the department of work.

9 Appendix

9.1 SV Model

	Per hour in average	Service voucher	Global figures
Number of vouchers (refunded)		86.500.353	
Production cost		19,11	1.652.836.947
Hourly labour cost of the service provider employee		17,55	1.518.175.625
	Loss of time (training, journeys, illness, car	17%	14.606.881
	Net wage	9,89	855.573.152
	Normal personal income taxes	1,19	102.819.769
	Normal social security contribution emplo	0,16	13.438.544
	Reduction	0	-
	Gross wage	11,24	971.831.465
	Normal social security contribution emplo	2,81	243.249.416
	Reduction /measures for employment / te	1,36	117.218.442
	Insurance + 13 month/End-of-Year bonus	1,12	97.183.146
	Travel allowance	1,2	103.800.423
Other costs of production		1,56	134.661.323
	Net administration (personal costs, office,	1,32	114.464.183
	Training costs	0,04	3.027.512
	Statutory charges and taxes	0,20	17.169.627
Profit			-
	Operating result	3,98	344.456.201
	Income company tax	1,18	101.890.144
	Profit	2,80	242.566.057
Operating cost		**23,09**	
VAT			-
	VAT	0	-
Seling price		**23,09**	
Income of the SV companies		23,09	1.997.293.148
	SV subsidy	13,69	1.184.189.831
	Invoiced administrative costs	0,4	34.600.141
	Price of the SV	9	778.503.176
User			
	Price of the SV	9	778.503.176
	(effective) Tax cut	2,23	192.641.000
	Final price paid by the user (out-of-pocket	6,77	585.862.176

9.2 Sensitivity analysis

9.2.1 Scenario a

9.2.1.1 Deadweight loss of 6,7%

Earn-back effect		13,70	1.184.760.450
Direct (employee)		6,97	603.246.450
	Income taxe	1,11	95.930.844
	Social security (employee + employer	1,50	130.125.060
	Tax on insurance	0,10	9.067.188
	Saving in unemployment benefits for service provider	4,26	368.123.359
			-
Direct (employer)		1,29	111.621.698
	Statutory charges	0,61	53.144.130
	Income compay tax	0,13	10.981.345
	Income taks, social security contribution and savings in unemployment benefits for administrative staff	0,55	47.496.223
			-
Indirect		5,43	469.892.302
	Income taks, social security contribution and savings in unemployment benefits produced by	4,90	424.001.739
	Saving in unemployment benefits for replacement workers	0,52	45.149.243
	Saving in unemployment benefits for replacement administrative staff	0,01	741.320
	Avoided costs for elderly people	0,00	-
	Avoided costs for migrant women	0,00	-

National	per SV	Global
Public support	15,74	1.357.048.942
Earn-back effect	13,70	1.184.760.450
VAT Loss	0,32	27.547.655
Net cost	**2,37**	**199.836.147**

Flanders	per SV	Total
Public support	15,74	1.357.048.942
Earn-back effect	0,70	60.536.035
VAT Loss	0,00	-
Net cost	**15,04**	**1.296.512.907**

Federal	per SV	Total
Public support	0,00	-
Earn-back effect	13,00	1.124.224.415
VAT Loss	0,32	27.547.655
Net cost	**-12,68**	**- 1.096.676.760**

9.2.1.2 Deadweight loss of 43,7%

Earn-back effect		10,21	883.066.213
Direct (employee)		4,21	364.016.883
	Income taxe	0,67	57.887.530
	Social security (employee + employer	0,91	78.521.338
	Tax on insurance	0,06	5.471.411
	Saving in unemployment benefits for service provider	2,57	222.136.603
			-
Direct (employer)		0,78	67.355.859
	Statutory charges	0,37	32.068.752
	Income compay tax	0,08	6.626.471
	Income taks, social security contribution and savings in unemployment benefits for administrative staff	0,33	28.660.636
			-
Indirect		5,22	451.693.472
	Income taks, social security contribution and savings in unemployment benefits produced by	4,90	424.001.739
	Saving in unemployment benefits for replacement workers	0,31	27.244.398
	Saving in unemployment benefits for replacement administrative staff	0,01	447.335

National	per SV	Global
Public support	15,74	1.357.048.942
Earn-back effect	10,21	883.066.213
VAT Loss	2,08	179.676.498
Net cost	**7,61**	**653.659.228**

Flanders	per SV	Total
Public support	15,74	1.357.048.942
Earn-back effect	0,35	30.289.829
VAT Loss	0,00	-
Net cost	**15,39**	**1.326.759.113**

Federal	per SV	Total
Public support	0,00	-
Earn-back effect	9,86	852.776.384
VAT Loss	2,08	179.676.498
Net cost	**-7,78**	**- 673.099.885**

9.2.2 Scenario b

9.2.2.1 Deadweight loss of 6,7%

Earn-back effect		11,25	972.759.581
Direct (employee)		6,97	603.246.450
	Income taxe	1,11	95.930.844
	Social security (employee + employer	1,50	130.125.060
	Tax on insurance	0,10	9.067.188
	Saving in unemployment benefits for service provider	4,26	368.123.359
			-
Direct (employer)		1,29	111.621.698
	Statutory charges	0,61	53.144.130
	Income compay tax	0,13	10.981.345
	Income taks, social security contribution and savings in unemployment benefits for administrative staff	0,55	47.496.223
			-
Indirect		2,98	257.891.432
	Income taks, social security contribution and savings in unemployment benefits produced by	2,45	212.000.869
	Saving in unemployment benefits for replacement workers	0,52	45.149.243
	Saving in unemployment benefits for replacement administrative staff	0,01	741.320

National	per SV	Global
Public support	15,74	1.357.048.942
Earn-back effect	11,25	972.759.581
VAT Loss	0,32	27.547.655
Net cost	**4,82**	**411.837.017**

Flanders	per SV	Total
Public support	15,74	1.357.048.942
Earn-back effect	0,50	43.304.705
VAT Loss	0,00	-
Net cost	**15,24**	**1.313.744.237**

Federal	per SV	Total
Public support	0,00	-
Earn-back effect	10,75	929.454.875
VAT Loss	0,32	27.547.655
Net cost	**-10,43**	**- 901.907.220**

9.2.3 Deadweight loss of 43,7%

Earn-back effect		7,76	671.065.344
Direct (employee)		4,21	364.016.883
	Income taxe	0,67	57.887.530
	Social security (employee + employer	0,91	78.521.338
	Tax on insurance	0,06	5.471.411
	Saving in unemployment benefits for service provider	2,57	222.136.603
			-
Direct (employer)		0,78	67.355.859
	Statutory charges	0,37	32.068.752
	Income compay tax	0,08	6.626.471
	Income taks, social security contribution and savings in unemployment benefits for administrative staff	0,33	28.660.636
			-
Indirect		2,77	239.692.602
	Income taks, social security contribution and savings in unemployment benefits produced by	2,45	212.000.869
	Saving in unemployment benefits for replacement workers	0,31	27.244.398
	Saving in unemployment benefits for replacement administrative staff	0,01	447.335

National	per SV	Global
Public support	15,74	1.357.048.942
Earn-back effect	7,76	671.065.344
VAT Loss	2,08	179.676.498
Net cost	**10,06**	**865.660.097**

Flanders	per SV	Total
Public support	15,74	1.357.048.942
Earn-back effect	0,23	19.891.931
VAT Loss	0,00	-
Net cost	**15,51**	**1.337.157.011**

Federal	per SV	Total
Public support	0,00	-
Earn-back effect	7,53	651.173.412
VAT Loss	2,08	179.676.498
Net cost	**-5,45**	**- 471.496.914**

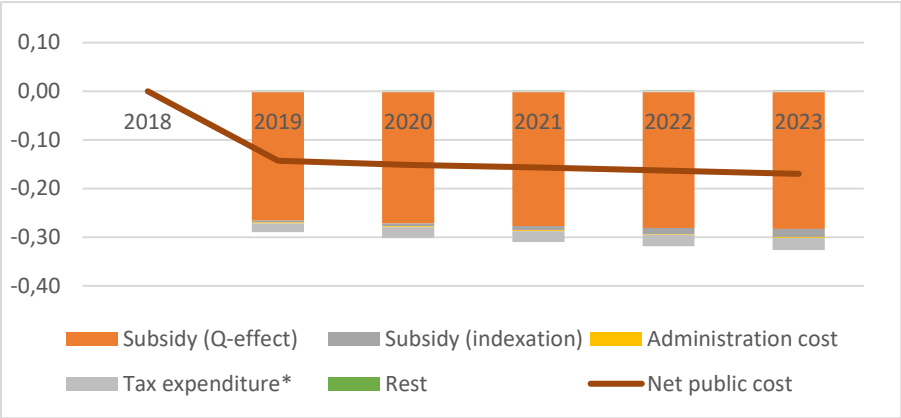
9.3 Template analysis policy options

Policy option A – eg: Decrease of 10% direct subsidy and compensating user price increase

Header 1: Description of policy measure
[decrease of direct subsidy with 10% in 2019 (from € 13.7 to € 12.3) and compensating user price increase from € 9 to € 10.4 (+16%)]

Header 2: Effects on gross and net public costs

Figure 27 Effect of 10% decrease in direct subsidy and compensating user price increase on gross and net cost (bln €)



[text explaining chart: policy measure implemented in 2019, this is both price and demand effect. Gross public costs decrease with € 300 mln. The effects on net public costs see are smaller as earn back effects are smaller because of lower SV demand. new unit price users = € 10,40 (+16%) Decrease in SV demand = 13%]

Header 3: Effects on policy goals

[combating undeclared work, integrating high-risk unemployed, improving work-life balance]

Header 4: Other effects

[eg employment effects, income (distribution) effects – quantitatively if possible, otherwise qualitatively]

Header 5: Implementation of the policy measure

[what is the first moment this measure can be implemented, practical and legal requirements]

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[i] Johannes Hers assessed the data and the forecasting model for the service vouchers as used by Flemish Ministry of Work and Social Economy in order to establish a solid baseline forecast and if possible provide an indication about the price elasticity of demand for vouchers using the effect of price changes on volume of vouchers. Various testing analysis on the model were done such as testing for stationarity of the series in the model , testing for structural breaks in the data and the model to check whether there are statistical reasons to use only the more recent observations to estimate the model, testing whether the model can be improved by using a different sample period to estimate the model -this analysis suggests that the explanatory power of the model can be (slightly) improved by incorporating observations over 2010 and 2009 in the estimation of the model-, testing whether the model can be improved by using other or more explanatory variables than the current model. Including the price of the voucher *instead of* the price dummies in the model decreases the explanatory power of the model substantially, but gives a significant negative coefficient on price (which might be interpreted as an indication of the effect of price changes on the volume of vouchers sold - see next point).
The results of the testing can be summarized as follows:

- It is not possible to identify a truly causal effect of price changes as the data do not provide a counterfactual / control group nor the possibility to construct one.
- It is possible to re-estimate the model used for the baseline forecast in such a way that the coefficient on price can be interpreted as a price elasticity of the demand for service vouchers. Doing this yields **a coefficient of -0,85, suggesting that a 10% increase in price decreases volume with 8,5%.**This is more or less in line with the estimate of the price-elasticity of the service vouchers as reported in the IDEA study (2018), which finds a somewhat **higher elasticity for Flanders of -1,16 and -0,83 for Brussels.**[i]