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– a regional AGE modelling analysis

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Abstract

Regional structural change is currently among the greatest challenges facing the public sector in many EU countries. In countries like Finland, where the public sectors have a large role in providing educational, health and social services, structural change rapidly becomes a fiscal problem. Demography is directly linked to the demand for public services and to the potential growth of regional economies. On the one hand, ageing increases the demand for age-related services; on the other, it decreases labour supply, limiting the growth potential of many regions.

The state's main tools for regional policies consist of both direct subsidies to the regions, as well as a mechanism reallocating tax revenues between poor and rich municipalities. However, the welfare costs of funding subsidies to poorer regions may be considerable. Thus, instruments not involving changes in spending have been preferred. Here, we consider the relocation of certain functions of the central government to the periphery – regionalization – as an instrument for coping with regional structural change. An improvement in regional municipal finances should also reduce the transfers received from the central government.

This study aims at evaluating the effects of regionalization on regional development in recent years and in the near future. The study is related to an on-going evaluation of the financial relations between the central government and local authorities.

Regionalization has in practice meant the relocation of central government jobs. We can cover the relocation of jobs quite accurately, and also had a data to make a plausible valuation of the number of employees that actually relocated with the jobs. Moreover, we are able to calculate state transfers to municipalities at the level of individual municipalities within each region. However, to capture all the implications of relocation to regional economies, we extend the model to take into account the average size and age profile of the families of those who

relocate. In this way, we obtain an estimate of the effects of regionalization on demand for public services locally, as well as on the overall effect on local population, labour supply and state, municipal and social security funds' budget balances.

We analyse regionalization at the level of the twenty regions of Finland, using a dynamic, regional, AGE model. Our main finding is that regionalization has negative overall economic effects for Finland – it decreases national product and employment, deteriorates the fiscal balance and increases state transfers to municipalities. However, these effects are small by magnitude. We found that the cumulative decrease in GDP until 2018 was a bit less than 0.05 percentages. The policy altogether succeeds in leveling regional disparities. We also find that while regionalization has been beneficial for many regions by creating new jobs and increasing municipal tax revenues, it has also used resources wastefully as there has been double efforts during the transition period.

Key words: regionalization, regional policies, structural change

JEL classification numbers: R13, R53

Tiivistelmä

Alueellinen rakennemuutos on yksi suurimmista julkisen sektorin kohtaamista haasteista monissa EU-maissa. Suomen kaltaisissa maissa, joissa julkisella sektorilla on keskeinen rooli koulutus-, terveys-, ja sosiaalipalveluiden järjestämisessä, rakennemuutoksesta tulee nopeasti fiskaalinen ongelma. Keskeisenä tekijänä julkisen kysynnän ja alueiden potentiaalisessa kasvussa on demografia. Ikääntyminen toisaalta lisää vanhuuteen liittyvien palveluiden kysyntää ja toisaalta vähentää työn tarjontaa, mikä rajoittaa useiden alueiden kasvupotentiaaleja.

Valtion aluepoliittiset keinot koostuvat suorista tuista alueille sekä valtionosuuksien tasausjärjestelmästä, joka siirtää verotuloja rikkaammilta kunnilta köyhemmille. Suorien tukimaksujen hyvinvointikustannukset saattavat olla huomattavat. Tämän vuoksi on pyritty suosimaan keinoja, joilla ei ole vaikutuksia julkiseen kulutukseen. Olemme tutkineet yhtä keinoa alueellisen rakennemuutoksen tasaamiseksi eli alueellistamista, jossa siirretään tiettyjä julkisen sektorin toimintoja pääkaupunkiseudulta muille alueille. Köyhempien kuntien talouden kohenemisen tulisi myös vähentää valtionosuusjärjestelmän kautta tapahtuvaa varojen siirtoa.

Tämä tutkimus pyrkii arvioimaan alueellistamisen taloudelliset vaikutukset viime vuosina ja lähitulevaisuudessa. Se liittyy meneillään olevaan valtion hallinnon ja aluehallinnon välisten rahoitussuhteiden evaluointiin.

Käytännössä alueellistaminen on tarkoittanut keskushallinnon työpaikkojen uudelleen sijoittamista. Pystyimme kartoittamaan siirtyneet työpaikat melko tarkasti, ja pystyimme myös arvioimaan kuinka moni työntekijä todellisuudessa muutti työpaikan mukana. Lisäksi pystyimme laskemaan julkisen vallan siirrot paikallishallinnoille kuntatasolla. Jotta pystyimme arvioimaan kaikki vaikutukset aluetalouksille, laajensimme tarkastelua ottamaan huomioon mukana muuttavien perheiden keskimääräisen koon ja ikärakenteen. Tällä tavalla pystyimme arvioimaan alueellistamisen vaikutukset julkisten palveluiden kysynnän muutoksille alueatasolla sekä vaikutukset alueiden väestökehitykseen, työn tarjontaan sekä julkisten sektoreiden budjettien tasapainoon.

Analysoimme alueellistamista Suomessa kahdenkymmenen maakunnan tasolla käyttämällä dynaamista ja alueellista yleisen tasapainon mallia VERM:iä. Johtopäätöksenä voimme todeta, että alueellistamisen taloudelliset vaikutukset ovat Suomelle negatiiviset – kansantuote ja työllisyys laskevat, julkisen sektorin alijäämä kasvaa ja valtion maksut kunnille kasvavat. Vaikutukset ovat kuitenkin määrällisesti pieniä. Arvioimme BKT:n kumulatiiviseksi laskuksi vuoteen 2018 mennessä vajaa 0.05 %. Alueellisten erojen tasoittamisessa politiikalla on kuitenkin suotuisia vaikutuksia. HavaitSIMME myös, että vaikka alueellistaminen on hyödyttänyt joitain alueita, se on myös sisältänyt resurssien tehotonta käyttöä erityisesti siirtymäkauden aikana.

Asiasanat: alueellistaminen, aluepolitiikka, rakennemuutos

JEL-luokittelu: R13, R53

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1. Introduction

Regional structural change is currently among the greatest challenges facing the public sector in many EU countries. Often, structural change is driven not only by economic factors, but also by demography. In countries like Finland, where the public sectors have a large role in providing educational, health and social services, structural change rapidly becomes a fiscal problem. Demography is directly linked to the demand for public services and to the potential growth of regional economies. On the one hand, ageing increases the demand for age-related services; on the other, it decreases labour supply, limiting the growth potential of many regions. Many regions are also heavily affected by changes within a specific industry.

The fiscal arsenal for coping with the implications structural change is limited. In Finland, the public sector consists of three main subsectors: the central (state) government, municipalities and the social security funds. Both the central government and municipalities collect income taxes and have various other tax-like instruments, whereas the social security funds' revenue consists mainly of employers' and employees' payments. The state's main tools for regional policies consist of both direct subsidies to the regions, as well as a mechanism reallocating tax revenues between poor and rich municipalities. However, the welfare costs of funding subsidies to poorer regions may be considerable. Thus, instruments not involving changes in spending have been preferred. Here, we consider the relocation of certain functions of the central government to the periphery – regionalization – as an instrument for coping with regional structural change, as it does not in principle involve direct changes in spending. An improvement in regional municipal finances should also reduce the transfers received from the central government.

This study aims at evaluating the effects of regionalization on regional development in recent years and in the near future. The study is related to an ongoing evaluation of the financial relations between the central government and local authorities. The evaluation is directed by the Ministry of Finance who have set guidelines for cost-benefit analysis (CBA) to assess the economic effects of regionalization (ATVA 2010). Our study contributes to regionalization CBA in both national and regional levels.

Regionalization has in practice meant the relocation of central government jobs; for example, the ministry of the interior relocated some of its jobs from the capital to northernmost Finland in 2006. The data we have allows us to cover the relocation of jobs quite accurately, and we also have the data of the number of employees who actually relocated with the jobs. Moreover, we are able to calculate state transfers to local authorities at the level of individual municipalities within each region. However, to capture all the implications of

relocation to regional economies, we extend the model to take into account the average size and age profile of the families of those who relocate. In this way, we obtain an estimate on the effects of regionalization on demand for public services locally, as well as on the overall effect on local population, labour supply and state, municipal and social security funds' budget balances.

In economic theory, the assessment of regionalization policies is most conveniently conceived in the context of spatial equilibrium theory. The most direct effect of an act of regionalization to the receiving region is an increase in labour demand which increases the real wage level of the receiving region. The effect of an increase in real wages to individual industries is mixed depending on whether an industry belongs to the tradable or the non-tradable sector. Tradable sector industries have to bear the higher costs without much effect on their output prices. Therefore, the effects on tradable sector industries are most likely negative in the receiving region. Conversely, tradable sector industries in the region of origin might gain if relocation eases some scarcity of resources, say dwellings. One of the goals of regionalization is to reduce economic "congestion" in the central region and it thus has some support from economic theory. For the industries in non-tradable sector such as services, the effects are less clear. Directly, regionalization increases labour demand in the public sector, which leads to an increased demand of services. In order to assess the costs and benefits of regionalization, we need to quantify these effects consistently. We can do this most conveniently in an applied general equilibrium (AGE) modelling framework that allows us to assess the effects of regionalization not only to the industries providing public services, but also the cumulative effects on other industries and on public sector finances as well. Most importantly, we can assess the impacts on total production or on different welfare measures caused by the policy when compared to a sensible baseline scenario. Therefore, our analysis with an AGE model directly yields relevant information to the regionalization CBA.

We analyse regionalization at the level of the twenty NUTS3 regions of Finland, using VERM, a dynamic, regional, AGE model of the Finnish economy. The model is based on the well-known TERM model, but has been extended in several aspects. It contains 46 industries and 54 commodities based on input/output-data of Statistics Finland including the public services relevant to our study. Even more importantly, VERM includes detailed public sector accounts and transfers between the sectors. The regions are linked to each other economically by trade flows and public fund transfers.

The study is organised as follows. Section two gives more detailed account of regionalization policy and its history in Finland and summary of relevant previous studies. Section three describes the model and data in more detail with separate subsection devoted to the description of government transfers in the

model. Section four summarizes our main simulation results, and section five concludes.

2. Regionalization

The use of regionalization as a tool of regional policy in Finland dates back to 1970s when the Centre Party, which had strong agrarian leanings, wanted to contain rural-urban migration and thus improve the situation of peripheral regions. In its current form, the regionalization efforts were stated in Government's strategy in 2001. The legislation has been updated few times since then and the current goals were set in 2008. However, the issue has not been extensively researched thus far. Honkatukia et al. (2007) used a regional AGE model to evaluate the previous regionalization efforts along with the governmental functions' productivity program. The study focused on time period 2001–2006 and consisted of relocation of 3378 government jobs. Although the study generated reasonable results, the data on the costs of the regionalization process was much sparser than in our present study, consisting merely of information about the relocated jobs in the receiving regions. The actual number of employees relocating from Helsinki to the other parts of the country was not known at the time. The overall results suggested that the regionalization efforts have had at least slightly positive effects on supporting the general regional policy goal of levelling regional disparities.

The Ministry of Finance, coordinating the regionalization effort, recently published a study of the economic effects of regionalization (ATVA 2011). The study was based on surveys and cost-benefit analyses and largely omitted general equilibrium effects. Our present study will complement and maybe shed new light to the results presented by Ministry of Finance study.

As the official goal of Finnish central government, some 4000–8000¹ government jobs are to be regionalized by 2015. Current regionalization plans consist of moving more than 5200 jobs from Helsinki metropolitan area to other locations. Almost 4400 jobs were already relocated by the end of 2011. This figure amounts 5.5 percent of total central government jobs. The share is considerably smaller when compared to the overall employment figures in the regions. Therefore, we do not anticipate encountering any large welfare changes due to regionalization. However, it was worthwhile to see whether there will be national level efficiency gains or losses due to the regionalization. Equally important is to see whether these policies can make significant improvements to advancing the regional policy goals. This would be valuable information in assessing how the projects have lived up to their expectations. We believe that our method can capture these effects rather well.

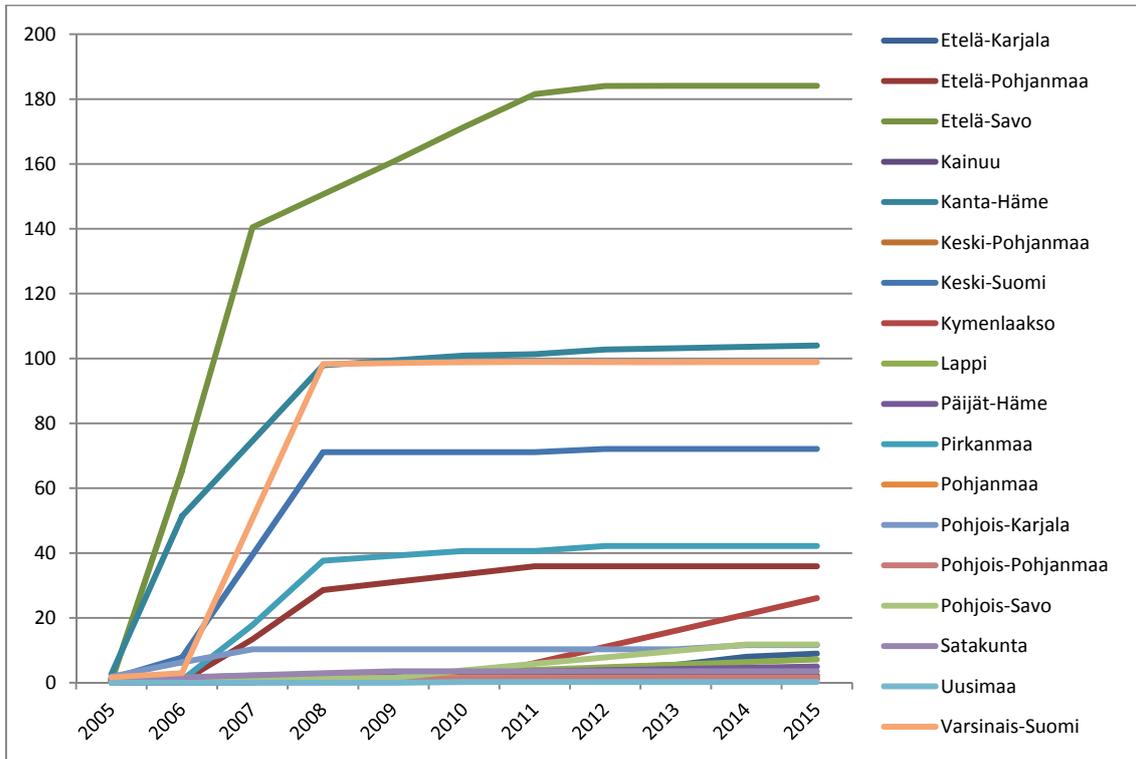
¹ Measured in person-years. The total Finnish central government person-years amounts to ca. 80 000. Thus the regionalization affects 5-10 % of the total jobs.

A related study by Pursiainen (2013a and 2013b) assessed the employment effects of regionalization policies with an econometric model and reviewed the cost-benefit analysis (CBA) framework proposed by Ministry of Finance (ATVA 2010). The econometric estimation (Pursiainen 2013a) did not yield significant results and the CBA framework appeared to be rather problematically formulated primarily because of several cases of double counting (Pursiainen 2013b). Our study complements this effort in several ways. The econometric study did not yield definitive results for cumulative effects of regionalization: the parameter estimates were either not statistically significant or were not amenable to reasonable interpretation. Furthermore, the models yielded only modest coefficients of determination. Our approach relies on actual regional data of industry I/O-structure and therefore a priori incorporates the most likely paths of cumulative effects. Our methodology also allows us to make consistent, counterfactual comparisons between with and without regionalization cumulative GDP for some relevant time frame, enabling us to assess the core costs and benefits of the regionalization effort. Some of the more fuzzy and subjective segments of regionalization costs and benefits such as agglomeration, synergy and individual career considerations did not enter our analysis. Therefore, although our results could serve as the core for the CBA, they are not complete as such.

For our study, we could cover only a part of the relocated jobs, since complete data was available only for the largest government agencies. Additionally to the number of jobs moved from Helsinki to the other parts of the country, we needed to know more precise valuation of the costs involved. These include the wages, the costs associated with the premises and the other costs associated with the personnel (e.g. re-education costs). Furthermore, we needed to have yearly data for reasonable analysis since our model is dynamic. The Ministry of Finance supplied the data for a selected sample of the most important relocated agencies. The data included the numbers of relocated jobs per agency; the timing of the relocation; estimates on the number of people leaving due to relocation from each region; and the number of additional jobs created to the receiving regions. Additionally, changes in public costs were estimated for each region. Some of the relocations actually take the form of combinations of several jobs located in various locations in different parts of the country. For some of the agencies we could make reasonable assumptions about the initial locations. For example, we could assume that the jobs were located across the country according to the general division of public costs. For the rest, we could not make such general assumption and we had to omit them from our analysis. In total, our study includes some 3360 relocations between 2005 and 2015. Of these, only one fifth are employees moving from the original location to the new one while the rest are recruited as new workers to the relocated agency. Figure 1 shows the cumulative amount of employees moving from their original location to the new one by region. Etelä-Savo, Kanta-Häme and Varsinais-Suomi are the regions that

receive most of the new, relocated labour supply. Etelä-Savo and Kanta-Häme are the regions that gain most in relative terms when compared to regional population and this will show in our results as well.

Figure 1. Employees who migrate from original region to new one (cumulative person-years)



3. Material and Methods

We use the regional AGE model VERM for our analysis as mentioned earlier. The model is based on the widely used TERM model, but has been extended in several aspects to be suitable in Finnish public economy analysis. First, we use very detailed data on the outlays and incomes of the central government, the municipalities and social security funds to realistically study the provision and financing of public services and social security transfers and pensions. Secondly, we use occupational data to study the demand for labour especially in service provision. Thirdly, the model is closed and uses MONASH-type dynamics².

We found an AGE model to be very suitable tool for analyzing the issue. With an AGE model, we can rather straightforwardly model complicated interactions between the relevant agents and isolate the effects from other developments in the economy, which cannot be easily done from observed data only. A regional model is obviously needed since the relocations take place between regions, and since we were particularly interested to analyze how different regions are affected by the regionalization policy. The model operates at NUTS3 level, with Finland divided in 20 regions. In reality, the jobs are relocated to much smaller regional entities, but we found this regional classification sufficient for our purposes, since the new locations are mostly the regional centres of these regions. However, we expect that the relative effects for the municipalities are probably somewhat more pronounced than the ones we present here for the 20 NUTS3 regions³. Nevertheless, we believe that the NUTS3 classification well illustrates the effects these policies have on overall regional development.

Computation of the transfers

State support to municipalities amounts to two thirds of the level of total tax revenues of the municipalities. Hence, they are indispensable when one wants to study the development of financial standing of municipalities. Of this support, more than two thirds are special, rule-bound state transfers to the local government. The state transfers are directed to different functions of the local government: general allowance education and culture, health and social care, and redistribution of tax revenues. The final third of state support consists of several, more disparate transfers with less unified payment rules. We assume that this final third of the state support is the policy variable that is varied in the simulations. The transfer system itself is assumed to continue following the rules that were in place at the time of the analysis. In reality, minor changes are introduced to the transfer system annually.

² More complete description of model dynamics is in Honkatukia (2009).

³ The model classification is based on pre-2011 regions. Nowadays there are only 19 NUTS regions in Finland after Eastern Uusimaa merged with Uusimaa.

As the base year of VERM is currently 2004, that point of time is also our point of departure in the description of the transfer system. In 2010, the state transfer system was renewed, but the practical consequences of the reform were limited. Calculation of the transfers still follows basically the earlier system (see e.g. Moisiso et al, 2010). However, the changes introduced in recent years have been taken into account here. The most remarkable change was related to education, where transfers were earlier calculated according to factual number of pupils, but from 2010 it was replaced by population in school age. Our model uses this renewed base for calculations from the beginning. However, factual numbers are imposed to the model between base year and years with available statistics (2004–2011). To reiterate, the basic parts of the state transfers to municipalities are:

- General allowance
- Health and social care transfer
- Education and culture transfer
- Redistribution of municipal tax income

The general allowance is calculated on the basis of population size, lagged changes in price level. In addition, several indicators measuring how peripherally the municipality is located affect the allowance. However, these measures hardly change over the course of time. It is rather different political decisions on the size of different parameters and weights that have changed more during 2004–2011.

Health and social care transfers are calculated by using age-specific cost coefficients for the services. The inhabitants are classified into five age groups:

- 0–6 years
- 7–64 years
- 65–74 years
- 75–84 years and
- 85 years or more.

Furthermore, we divide the 7–64-year-olds into two categories (7–15 and 16–64) in order to readily have separate measures for school and working age populations.

Redistribution of the municipal tax income is a ‘Robin Hood’ system where a municipality receives a redistribution transfer if its tax income per capita is less than 91.86 per cent of the national average tax income per capita (redistribution

cut-off level). The redistribution transfer amounts to the difference between the cut-off level and the tax income per capita. If the tax revenues of a municipality surpass the national average, 37 per cent of the tax income surpassing the average per-capita level is claimed by the state to finance the transfers to poorer municipalities. Due to this asymmetry in the system, we decided to create a municipal dimension to the model, just for the calculation of the redistribution transfer. Factual statistics of each municipality is being used for the period of 2004–2011 (payments in 2011 are based on 2009 figures) while from then on each municipality is assumed to follow the development of its corresponding region.

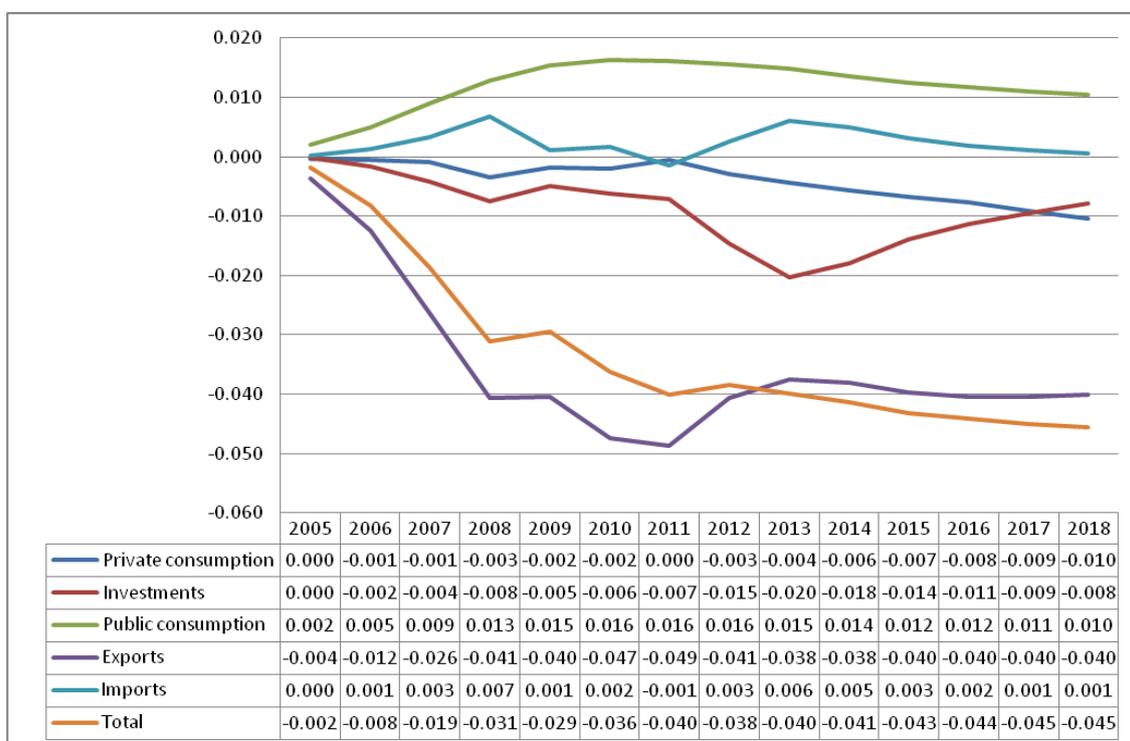
4. Results

In this chapter we summarize our results based on VERM simulations. The results are comparisons of business as usual case where no regionalization occurs to the case where regionalization happens as planned. The base year of the model is 2004 and the baseline simulation solves with known historical data up to present after which it follows economic prediction derived from various sources. For our analysis, we needed to modify standard VERM baseline by removing the regionalization measures already completed. That way we could assess the effects of regionalization measures starting from the year 2005. Based on the data received from Ministry of Finance, we built counterfactual that included changes in regional labour supply, public expenditures and employment in public services industry due to regionalization.

National level

At the national level, the regionalization policy generates GDP losses. Figure 2 shows the deviation of national level GDP and its components from baseline during the simulation period. We can see that GDP decreases because of regionalization: in 2018 the GDP is 0.05 % less in real terms than in the baseline. The magnitude of the overall effect is thus modest, as anticipated. We can see an initial increase in public consumption during the transition period. Increased public consumption displaces some of the private consumption that declines as a result. After the transition period, public consumption decreases as well but remains at a higher level than in the baseline. A large part of the effects during the transition period can be explained by double effort – for some time a government occupation is filled in both original and receiving locations – and by new investments needed for new or renovated premises in the receiving regions. However, aggregate investments decrease despite increased investments by public sector (which we can see later in figure 3). Therefore, as with consumption, we see that increased public investments are displacing private investments disproportionately. Investments seem to stay at somewhat lower level than in the baseline. Exports decrease significantly as compared to relatively stable imports. This results from the non-tradable sector gaining at the expense of the tradable sector. The persistently higher level of public consumption is problematic as it undermines one of the main rationales for regionalization policy –contributing to regional policy goals without increasing spending. As the government bodies that are directly affected by regionalization reduce or maintain their aggregate level of spending even after transition, the overall increase in public spending has to come from other sources, which we next examine with more detail.

Figure 2. Real GDP development at the national level: total and expenditure side contributions (cumulative percentage deviation from baseline in 2005–2018).



In figures 3 and 4 we see how regionalization affects central government expenditure and revenue categories. Four expenditure categories are significantly affected by the policy: government purchases, net interest payments, net transfers to municipalities and other government expenditure. Government purchases increase most and the highest increase coincides with the transition period. The revenues increase as well but by less than expenditures, and thus we see an increase in public sector deficits (figure 5). The increase in the net interest payments by the government is a direct result of increased deficits.

Figure 3. Central government expenditures after regionalization (deviation from baseline, millions of euros)

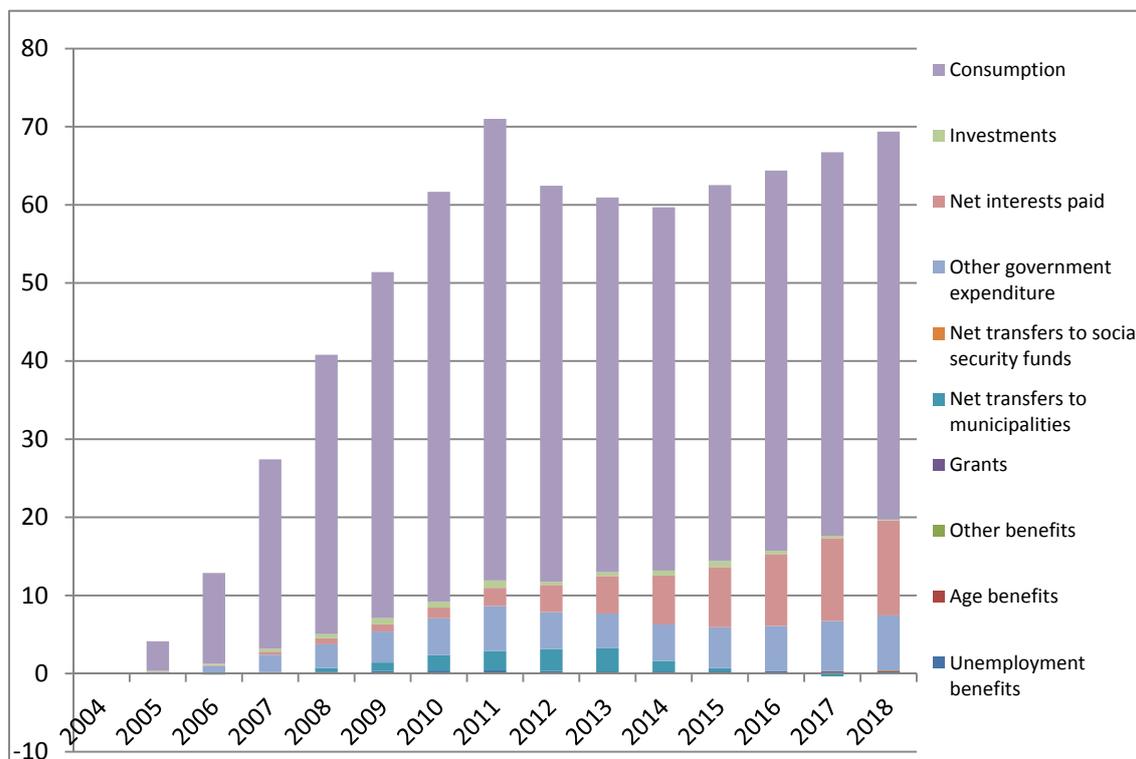


Figure 4. Central government revenues after regionalization (deviation from baseline, millions of euros)

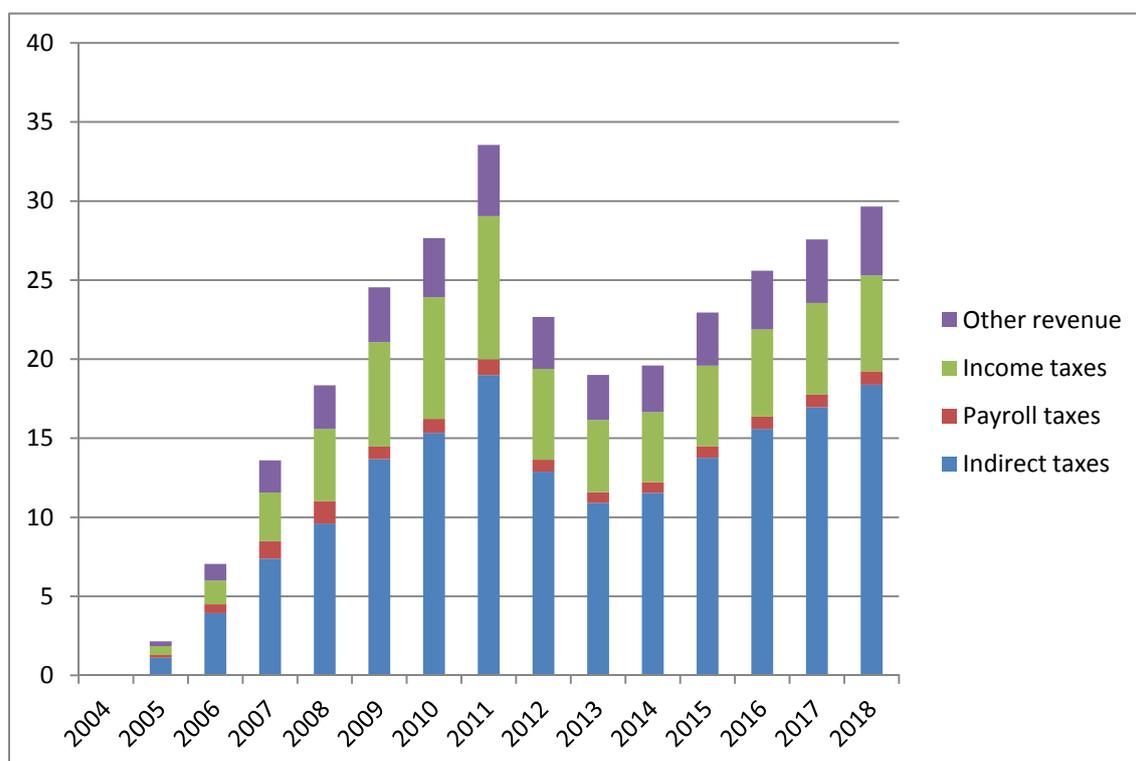
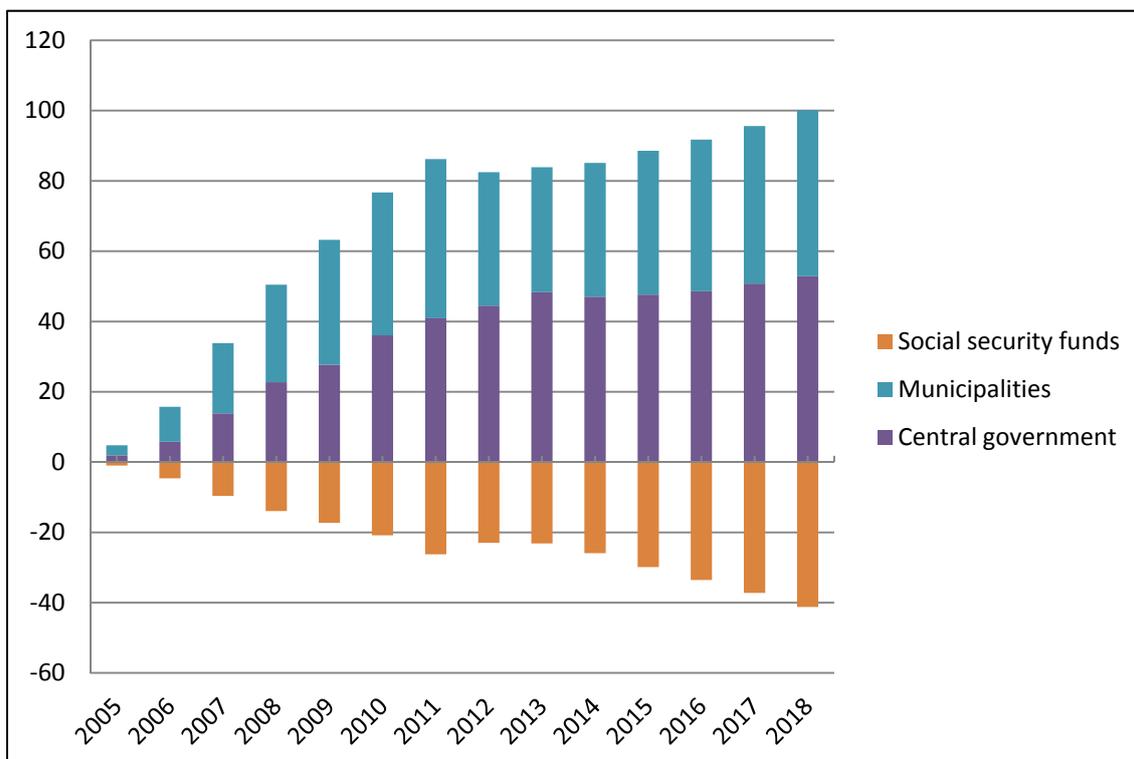


Figure 5. Public sector deficits by sector (deviation from baseline, millions of euros)



We expected that the net transfers to municipalities would decrease due to the policy as the receiving regions experience increase in their incomes. According to our results, the transfers in the VOS system⁴ from central government to municipalities do decrease (figure 6). However, the other transfers from central government to municipalities increase by an amount greater than the decrease in net VOS payments. Figure 7 shows what happens to separate VOS payment categories. Regional equalization payments decrease most but with the expense of increasing other central government transfers to municipalities.

⁴ VOS is a government system that reallocates funds from well-off municipalities to the poor ones. It makes up about two thirds of all the transfers from central government to municipalities.

Figure 6. Transfers from central government to municipalities after regionalization (deviation from baseline, millions of euros)

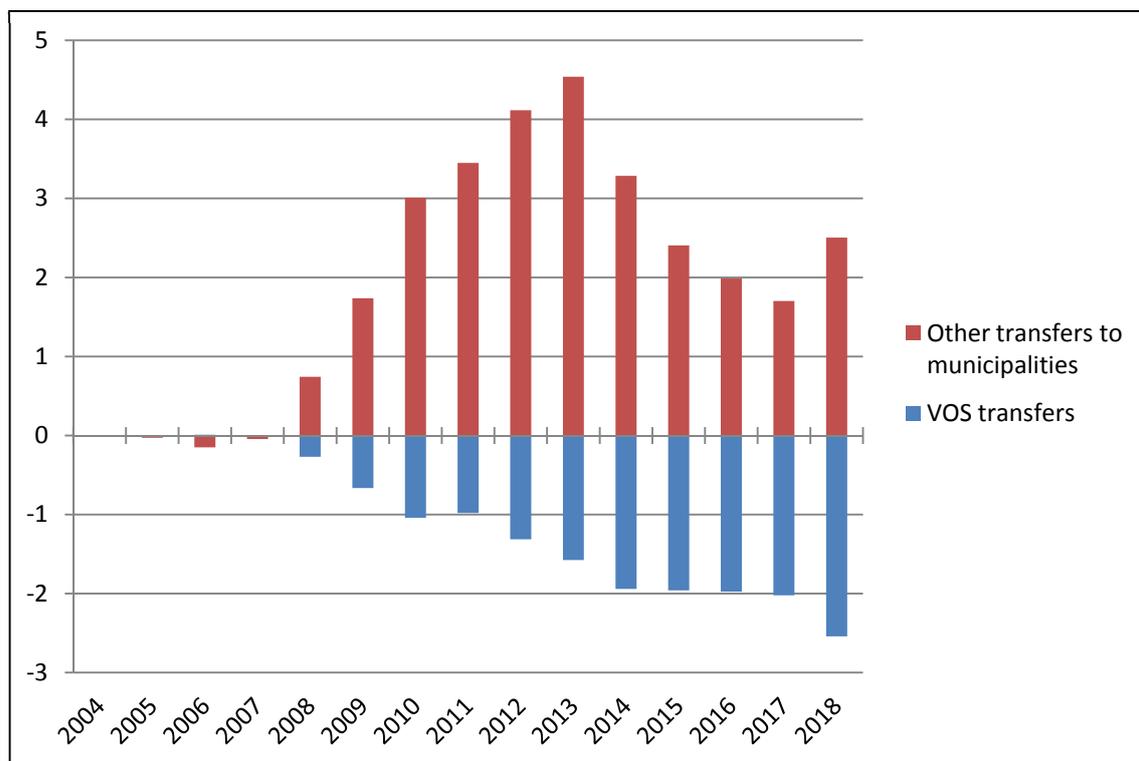


Figure 7. VOS transfer development (deviation from baseline, millions of euros)

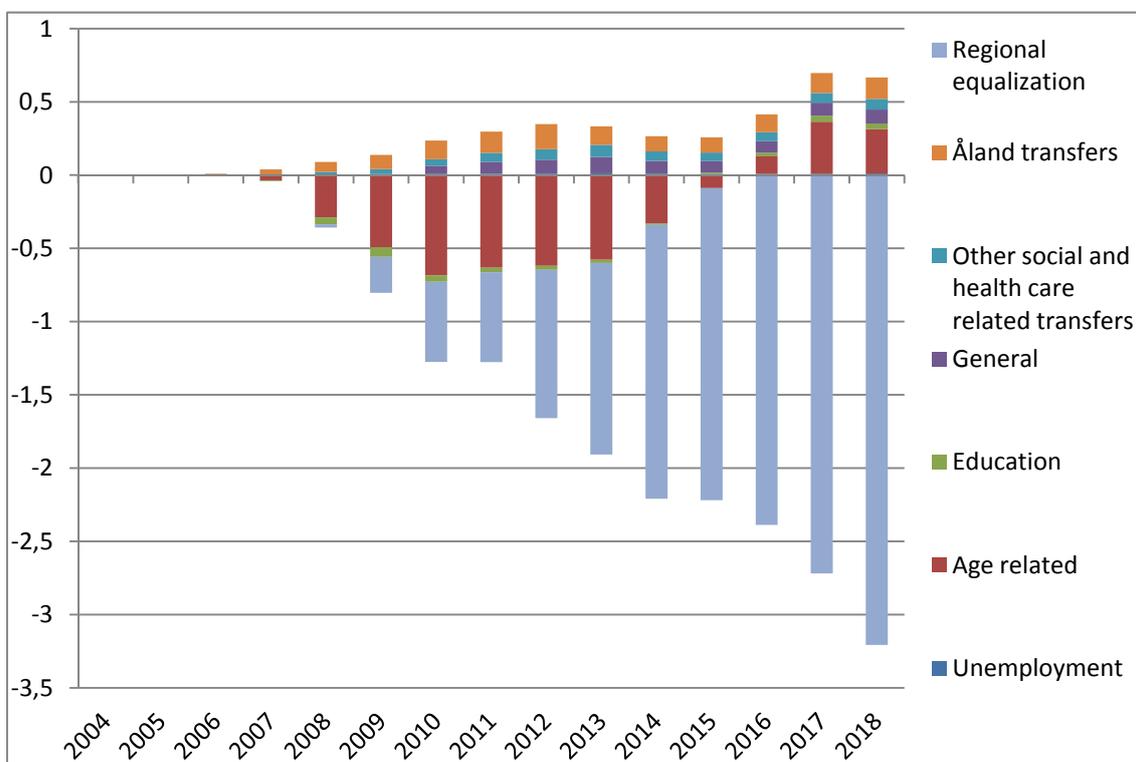
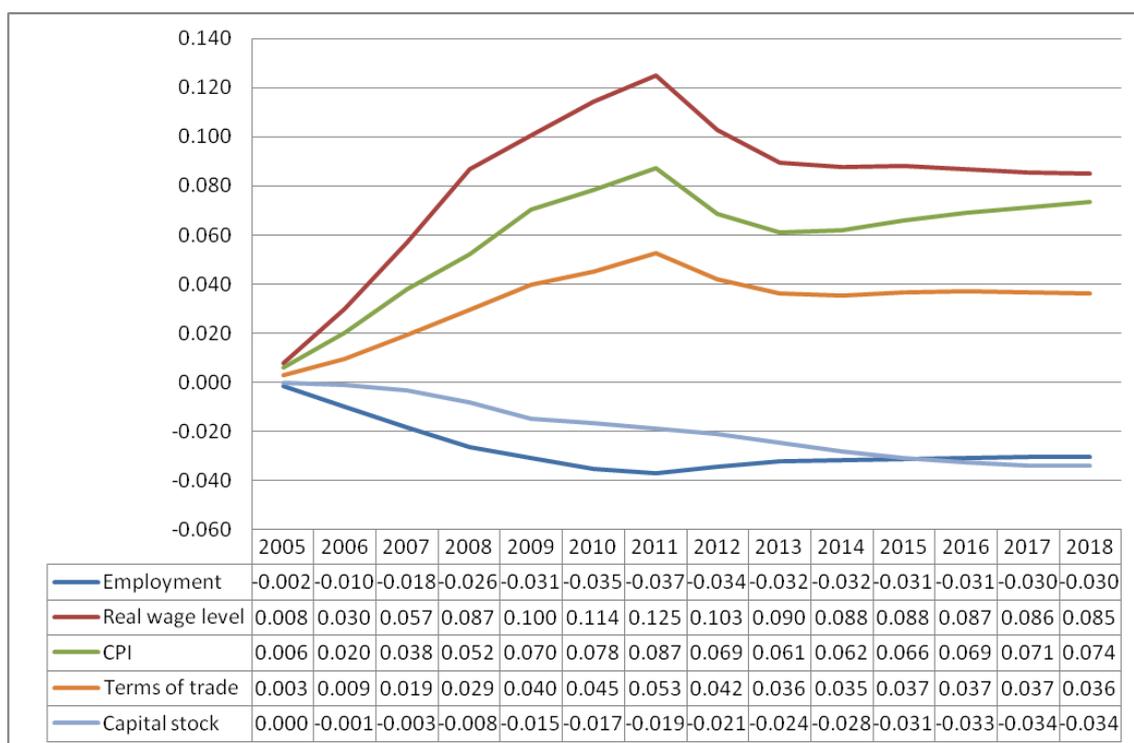


Figure 8 collects the changes in some macro variables that shed more light to the GDP results. Generally, regionalization seems to have negative effects on employment which decreases by 0.03 percents compared to the baseline. This decrease results from negative effects on overall economic activity. Aggregate capital stock decreases together with employment and investments. Real wages and consumer prices both increase at the national level. We will return to the causes of real wage and consumer price index increases when we examine the regional differences in changes.

Figure 8. Changes in some macro variables (cumulative percentage deviation from baseline, 2005–2018)



Regional level

At the regional level we see that real wages increase most in the regions that lose jobs and decrease most on regions that gain most of the relocated jobs (figure 9). This seems counterintuitive as spatial equilibrium theory would predict that the real wages would decrease when labour demand diminishes. However, the empirical industrial structure in our model causes the effect of price changes to dominate. As nominal wages have trajectories independent of region, we are left with the changes in consumer price index to explain the real wage changes. As figure 10 shows, the consumer price index decreases most in Uusimaa, the central region and increases most in Kanta-Häme and Etelä-Savo. By examining consumer price index by commodity, we see that commodity prices that respond most to the regionalization are the public services – that is directly affected by

regionalization – and the letting of own property which is an indirect effect of induced migration. Therefore, the real wages in Uusimaa increase due to decreased residential costs. The effect is opposite in the receiving regions.

Figure 9. *Real wage changes by region (cumulative percentage deviation from baseline, 2005–2018)*

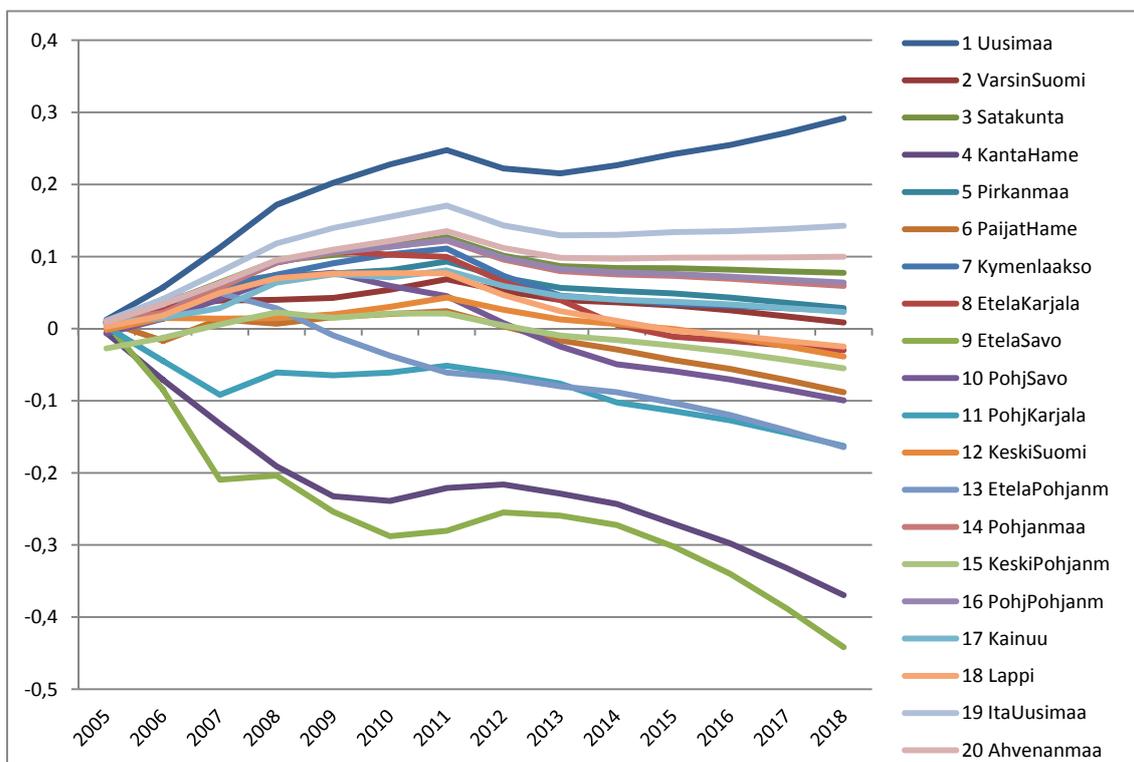
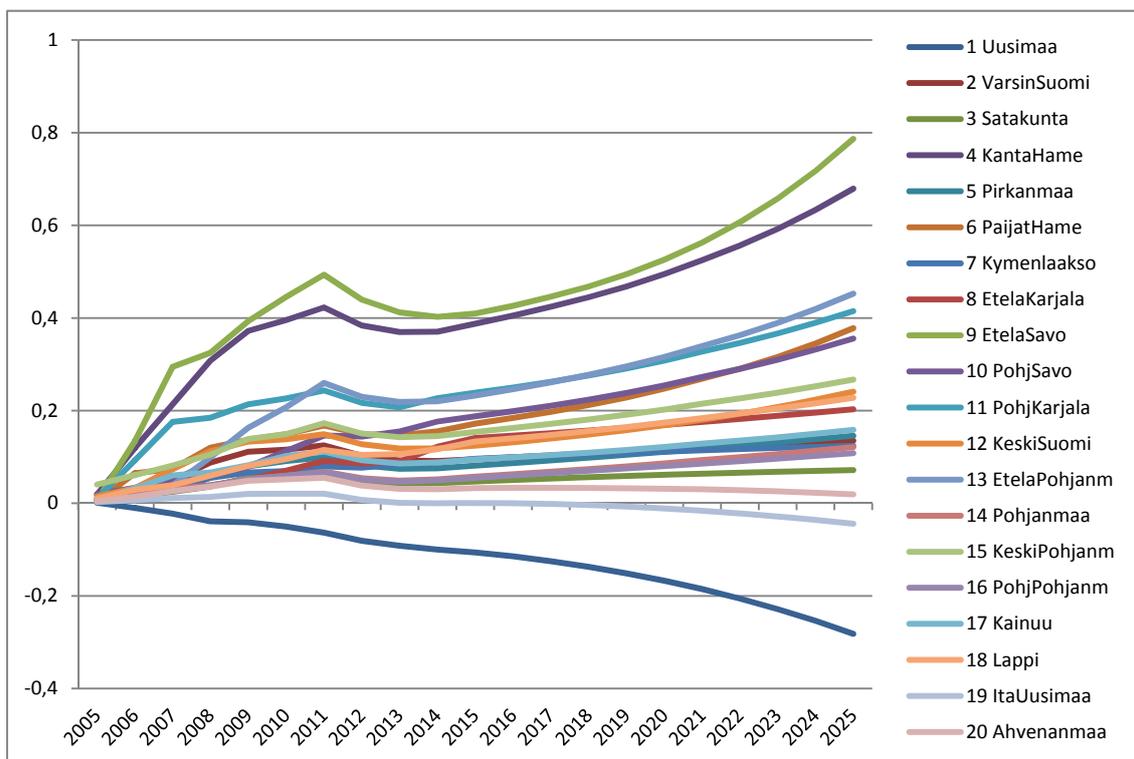


Figure 10. Consumer price index changes by region (cumulative percentage deviation from baseline, 2005–2018)



In figure 11 we see the GDP and employment effects for all the twenty regions in 2015 and 2025. The two regions that gain most are Kanta-Häme and Etelä-Savo that are the regions with highest amount of extra labour supply migrated with regionalized jobs. Conversely the central region of Uusimaa will lose in both GDP and employment. The changes in consumption have a similar regional pattern with smaller deviations from baseline (figure 12). The aggregate national level results do not imply overall welfare improvements, rather the opposite. However, the goal of levelling regional disparities does stand out from the regional results – peripheral regions gain at the expense of the capital region. There are two regions that especially stand out: Etelä-Savo and Kanta-Häme. Interestingly, some regions, such as Kainuu, with perhaps rather more pressing regional development problems, gain next to nothing from regionalization.

Figure 11. Regional GDP and employment effects (percentage deviation from baseline, 2015 and 2025)

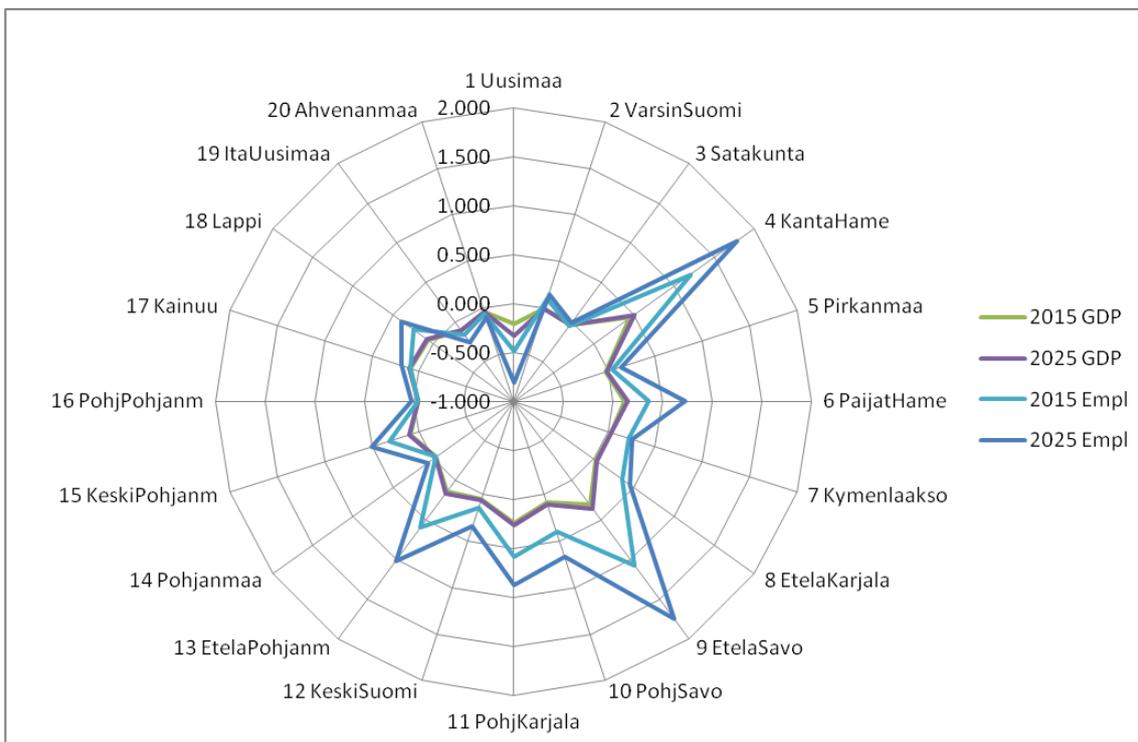
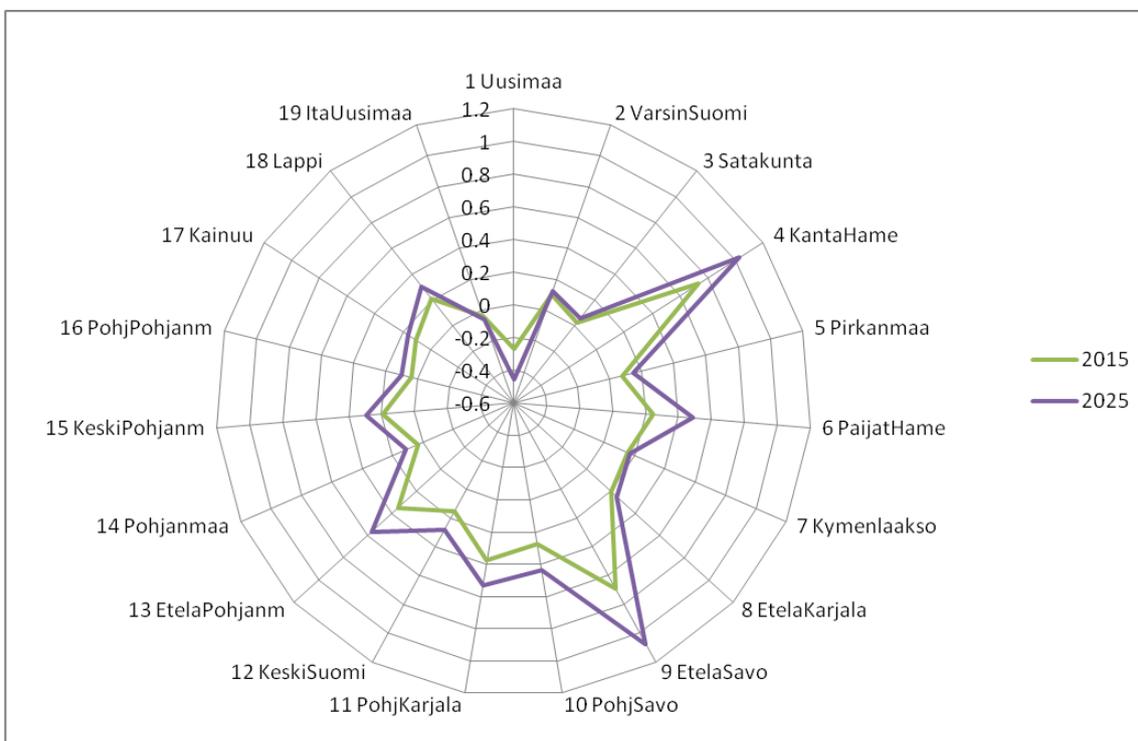


Figure 12. Regional consumption effects (percentage deviation from baseline, 2015 and 2025)



5. Conclusion

In this study we have analyzed the economic effects of Finnish central government's regionalization program. We found it questionable whether the policy achieves the goals set to it. From a strict CBA point of view, our results are discouraging: there is a clear, if modest, fall in national product after regionalization. The policy seems to increase public spending and causes public finances to deteriorate compared to the business-as-usual case. Therefore, we do not find support for the claim that regionalization would be a spending neutral regional policy tool. The transfers from central government to municipalities increase too, which runs counter to the idea of regionalization policy decreasing municipalities' dependency on central government funding. However, we did find evidence on decreased regional disparities due to regionalization – some peripheral regions gain at the expense of the capital region. Yet it is difficult to judge on the basis of our results whether this effect contributes to overall regional development goals and whether the regions that most need extra boost can get it through the current regionalization program.

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