

**Unclassified**

**ECO/WKP(2011)50**

Organisation de Coopération et de Développement Économiques  
Organisation for Economic Co-operation and Development

**19-Jul-2011**

**English - Or. English**

**ECONOMICS DEPARTMENT**

ECO/WKP(2011)50  
Unclassified

**PUBLIC SECTOR SPENDING EFFICIENCY IN ESTONIA: HEALTHCARE AND LOCAL GOVERNMENT**

**ECONOMICS DEPARTMENT WORKING PAPER No. 881**

**By Zuzana Smidova**

All Economics Department Working Papers are available through the OECD Internet website at [www.oecd.org/eco/workingpapers](http://www.oecd.org/eco/workingpapers).

**JT03305298**

Document complet disponible sur OLIS dans son format d'origine  
Complete document available on OLIS in its original format

English - Or. English

## ABSTRACT/RÉSUMÉ

**Public sector spending efficiency in Estonia: healthcare and local government**

The Estonian fiscal position is much better than in many OECD countries, the country stands out for having a rather lean government sector and the authorities are striving for efficient use of existing resources. Both healthcare and local government were particularly hit by the decrease of resources as a result of the unprecedented GDP fall during the downturn. As a return to high revenue buoyancy will not be immediate, there are challenges for delivering the same with less money but it is also an opportunity to reconsider provision of public services. The healthcare sector is state dominated and offers some scope for efficiency improvements. On the supply side, further streamlining of the existing hospital network, emphasising primary care, and keeping an eye on the standard of quality of care, would be helpful. A number of market signals are already in place on the demand side, such as fees and drug co-payments. Yet these raise issues of accessibility of healthcare, in particular for financially distressed households. A cap on out-of-pocket spending together with active promotion of least expensive drugs use would help to address this issue. Local government seems rather extensive and fragmented for such a small country. Exploiting economies of scale, either by merging or requiring deeper co-operation, should bring gains in terms of public service efficiency. Offering greater scope for tax raising at the local level can incentivise the municipalities to adopt more growth-oriented economic policies. This working Paper relates to the *2010 Economic Survey of Estonia* ([www.oecd.org/eco/surveys/estonia](http://www.oecd.org/eco/surveys/estonia)).

*JEL Classification:* H41, H72, I12, I18

*Keywords:* public sector; health care; local government; Estonia

\*\*\*\*\*

**Efficienc e des dépenses du secteur public en Estonie: soins de santé et collectivités locales**

La situation budgétaire de l'Estonie est bien meilleure que celle de nombreux pays de l'OCDE ; ce pays se distingue en effet par un secteur public relativement resserré et les autorités s'y efforcent de faire un usage efficace des ressources existantes. Les soins de santé et les collectivités locales ont été particulièrement frappés par la diminution des ressources, qui s'explique par la chute sans précédent du PIB enregistrée pendant la récession. Alors que le retour à des recettes abondantes ne devrait pas être immédiat, la difficulté va consister à offrir les mêmes prestations avec moins d'argent, mais ce sera peut-être aussi l'occasion de reconsidérer la fourniture des services publics. Le secteur des soins de santé est dominé par l'État et comporte une marge d'amélioration de l'efficacité. Du côté de l'offre, il serait utile de poursuivre la rationalisation du réseau hospitalier existant et de mettre l'accent sur les soins primaires, tout en veillant à préserver la norme de qualité des soins. Du côté de la demande, un certain nombre de signaux de marchés sont déjà en place, par exemple les honoraires ou les franchises sur les médicaments. Ceci soulève toutefois des questions en termes d'accessibilité des soins de santé, en particulier pour les ménages en proie à des difficultés financières. Plafonner les dépenses restant à la charge des patients et promouvoir activement les médicaments les moins chers permettrait de s'attaquer à ce problème. Les collectivités locales paraissent relativement nombreuses et dispersées pour un si petit pays. Exploiter des économies d'échelle, soit en procédant à des regroupements, soit en imposant une plus grande coopération entre les différentes collectivités, permettrait de réaliser des gains sur le plan de l'efficacité du service public. Donner aux municipalités plus de latitude pour lever des impôts au niveau local les inciterait sans doute à adopter des stratégies économiques plus délibérément axées sur la croissance. Ce Document de travail se rapporte à l'*Étude économique de l'OCDE de l'Estonie 2011* ([www.oecd.org/eco/etudes/estonie](http://www.oecd.org/eco/etudes/estonie)).

*Classification JEL:* H41, H72, I12, I18

*Mots clés:* Secteur public, les soins de santé; les collectivités locales; Estonie

Copyright OECD 2011

Application for permission to reproduce or translate all, or part of, this material should be made to: Head of Publications Service, OECD, 2 rue André-Pascal, 75775 Paris Cedex 16, France.

## TABLE OF CONTENTS

PUBLIC SECTOR SPENDING EFFICIENCY IN ESTONIA: HEALTHCARE AND LOCAL GOVERNMENT .....	5
Healthcare is particularly susceptible to spending acceleration .....	5
The scope for efficiency gains exists .....	7
A well regulated public system applies numerous market signalling features .....	8
Public health spending funded by a social tax on labour and mainly via a health insurance fund .....	9
Rising out-of-pocket payments bring issues of accessibility .....	11
Low pay and working conditions in the health care sector .....	14
Fragmented local government in need of reform .....	16
Limited revenue raising opportunities .....	17
Tight budgets and borrowing restrictions .....	19
Previous reform efforts unsuccessful .....	20
Horizontal co-operation developing .....	20
BIBLIOGRAPHY .....	24

### Figures

Figure 1. Public expenditure compared internationally .....	6
Figure 2. Life expectancy and health expenditure, 2008 .....	8
Figure 3. Relative efficiency of the health output of life expectancy, 2007 .....	9
Figure 4. Out of pocket health payments by expenditure distribution .....	13
Figure 5. Staff and salaries .....	15
Figure 6. Composition of local government revenue and expenditure, 2009 .....	17
Figure 7. Distribution of subsidies in local government revenue, 2008 .....	19

### Boxes

Box 1. Main actors of healthcare system .....	9
Box 2. Out-of-pocket payments .....	12
Box 3. Equalisation mechanism .....	18
Box 4. Local government reforms in the region .....	21
Box 5. Recommendations on public sector efficiency .....	22



## PUBLIC SECTOR SPENDING EFFICIENCY IN ESTONIA: HEALTHCARE AND LOCAL GOVERNMENT

By Zuzana Smidova<sup>1</sup>

Estonia's current budgetary outlook is better by far than that of most OECD countries. The authorities have been able to exercise remarkable flexibility during the downturn, cutting expenditures as revenues collapsed. Yet this came at a cost, and the State Budget Strategy for 2011-14 calls for more efficient use of budgetary funds and creation of fiscal space. The authorities wish to remain fiscally prudent and plan to broadly maintain the current moderate level of public spending (Convergence Programme, 2010). The chapter looks at two selected areas: healthcare and local government. Both have experienced a considerable reduction of resources during the downturn. In health care the waiting times have been increased and prices for services of providers cut. Local governments are experiencing decrease of resources both as a result of lower income tax revenues and a decrease in the tax sharing arrangement. Since return to the previously revenue buoyant growth is unlikely for some time, the challenge is to deliver services while improving quality in the years to come.

Measured by general government expenditure as a share of GDP, Estonia stands out as having a lean government which is typified by its distortion free approach to policy making (Figure 1). General government expenditure remained more or less stable at some 35% of GDP during the decade prior to the 2008 downturn, about 10 percentage points below the OECD average. Estonian government spending is notably low when compared with other Nordic countries, where it is at some 50% of GDP. However, within OECD area there are marked differences in how much governments spend. While most continental European countries and the Nordics rank above average others such as Korea, New Zealand or United States spend below the average. Due to the sharp GDP fall and increased social spending as a result of the downturn, Estonian government spending reached over 47% of GDP in 2009. It is set to peak in 2010 before starting to decrease slowly. According to the Convergence Programme (2010), the level of general government expenditures is set to decrease again to levels below 40% in the medium-term.

### Healthcare is particularly susceptible to spending acceleration

Although looming spending pressures as a result of projected population ageing are not as pronounced as in other countries, they nevertheless lead to more emphasis on the efficient use of available resources. Experience from other OECD economies underscores that health expenditures tend to rise together with increasing incomes and technology developments (Oliveira Martins and de la Maisonnette, 2006). Technological advances mean on one hand progress in curing illnesses but very often also increase in costs. Each of these trends increases pressure on expenditures and this is true also for Estonia. With total healthcare spending of 6.1% of GDP (2008) Estonia spends well below the OECD average of 9% of GDP. Also, healthcare spending as a share of the government expenditure at 10.8% is low compared to both the

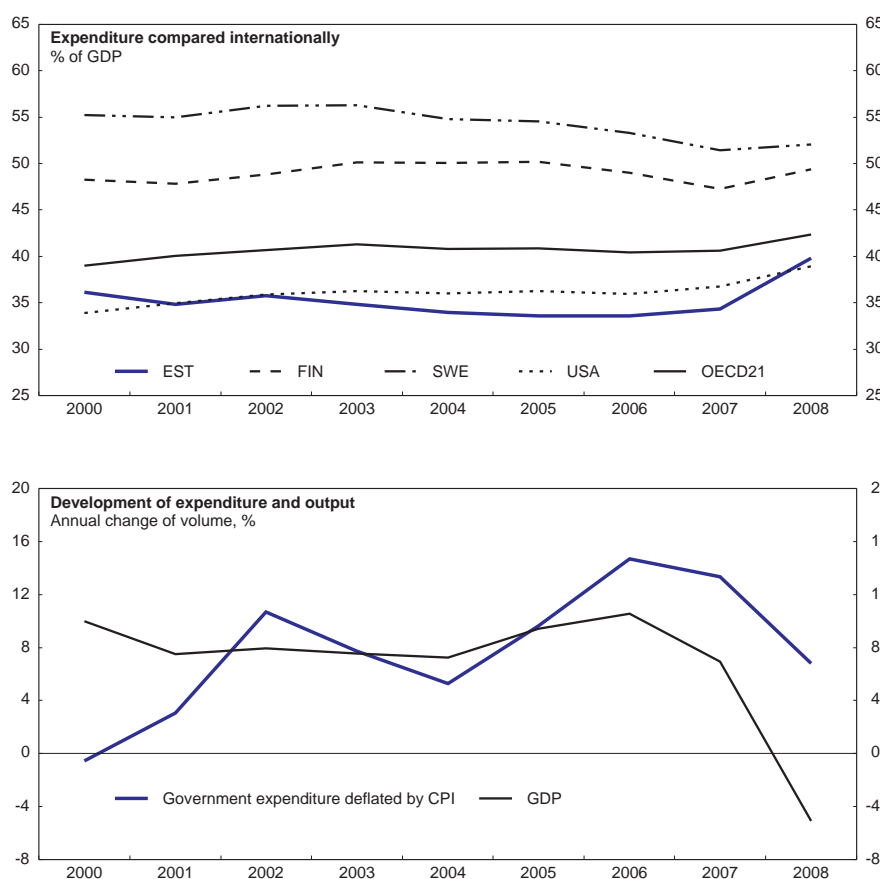
---

1. The author is Economist in the OECD Economics Department. This paper was originally produced for the *OECD Economic Survey of Estonia* ([www.oecd.org/eco/surveys/estonia](http://www.oecd.org/eco/surveys/estonia)) published in April 2011 under the authority of the Economic and Development Review Committee. The author thanks to OECD staff members Andrew Dean, Robert Ford, Andreas Wörgötter and Philip Hemmings for valuable comments, Margaret Morgan for research and statistical assistance, Pascal Halim and Josiane Guitierrez for secretarial assistance.

EU and OECD average. Yet, countries that spend the most do not necessarily fare best in terms of health status indicators and quality of care as is clear with the high US spending of 16% GDP and only an average life expectancy.

Although the population seems satisfied overall with the existing healthcare system, Estonia does not score well in terms of health status<sup>2</sup>. Life expectancy is still low. It was 74.6 years in 2008 while the figure for OECD average was 79.0 years, and in Finland and Sweden, 79.9 and 81.4 years respectively. The situation is particularly alarming for men at 65, whose life expectancy of 13.6 years is one of the lowest in OECD, and on a par with Hungary. Part of the explanation could be attributed to unhealthy lifestyle of certain parts of the population as Estonia has the highest alcohol consumption among the OECD countries and ranks among the top on smoking and obesity. But as illustrated below, socio-economic factors can only partly explain a healthcare system's performance. Indeed, the authorities recognize that low life expectancy is an issue, and the State Budget Strategy for 2011-14 aims at increasing health-adjusted life expectancy by three to four years by 2014.

**Figure 1. Public expenditure compared internationally**



Source: OECD, *Government Expenditure by Function (COFOG) Database*.

- 70% of the population evaluates the overall quality of healthcare as good according to a Eurobarometer poll, which is the same as EU average but higher than in neighbouring Baltic countries (Eurobarometer, 2010).

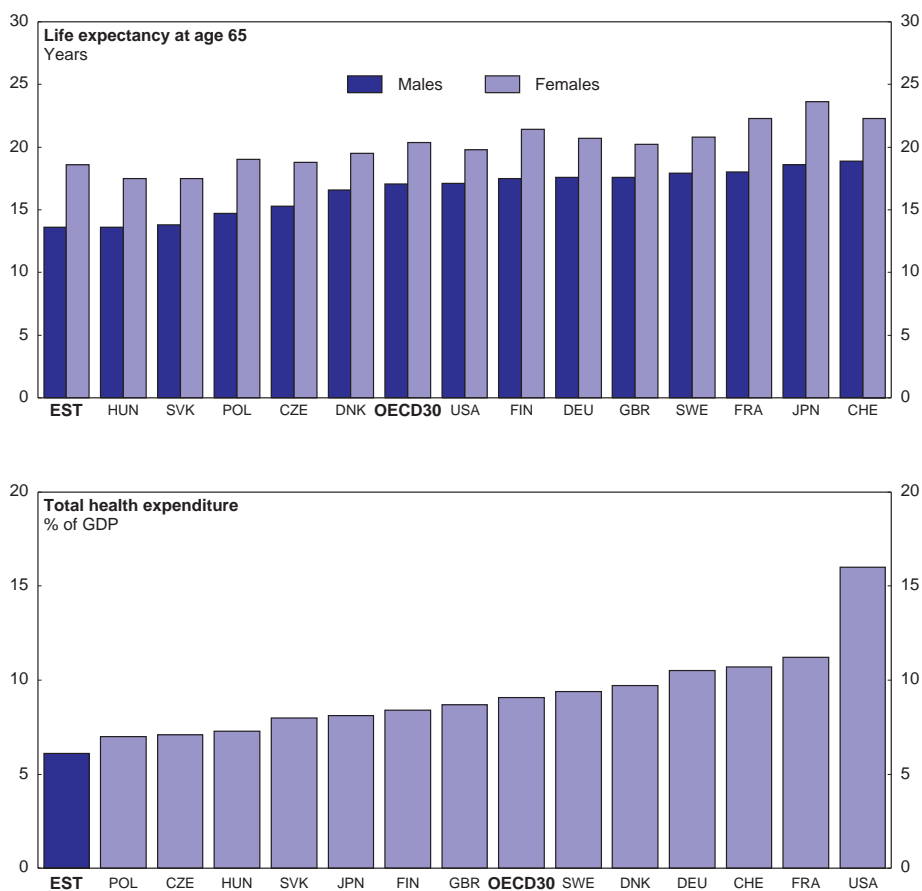
### *The scope for efficiency gains exists*

Recent OECD work using both panel data regressions and data envelopment analysis shows that there is scope for efficiency improvements in healthcare across most countries. Potential gains in health outcomes by improving efficiency can be significantly higher than just by increasing expenditure. Furthermore, looking at groups of the countries sharing similar institutional characteristics showed that no broad type of health care system is particularly better than others in improving population health status in a cost-effective manner. In other words, efficiency improvements seem to be feasible within all institutional setups of OECD health systems (Joumard *et al.*, 2010a). Such analysis for Estonia indicates that there is scope for efficiency gains (Figure 3)<sup>3</sup>. Given the low level of spending, healthcare system performance falls slightly below OECD average results on possible improvements. Life expectancy could be increased by 2 years maintaining the same level of spending while moving to a more efficient use of existing resources. Analysis using two inputs: health expenditure and environment – a composite socio-economic indicator that includes GDP per capita, educational attainment and lifestyle factors (see note of Figure 3), shows that life expectancy at birth could be increased by 2.5 years and life expectancy at 65 by 1.9 years by moving to a more efficient healthcare system. Both of these indicators are very close to or at average outcomes for OECD countries. However, an analysis focusing on volumes rather than value terms, by substituting the health expenditure by the number of health professionals, shows a potential for significant increases in life expectancy at birth (of 8 years) that clearly exceeds other OECD countries efficiency reserves. Such results are quite common in CEE countries and suggest that there might be many health professionals but they are poorly paid and/or have low incentives for treating patients. As will be shown below, the number of nursing staff and pay levels could be an issue.

---

3. Data envelopment analysis measures health system efficiency of OECD countries. It creates an efficiency frontier by optimising the input to output ratio to calculate efficiency scores for each country. For more details see Joumard *et al.* (2010).

Figure 2. Life expectancy and health expenditure, 2008



Note: Data refer to 2008 or latest available year.

Source: OECD Health Data 2010, version: October 2010.

### ***A well regulated public system applies numerous market signalling features***

Estonia has a mandatory public system of healthcare with almost universal coverage and a single insurer. When reforming the system from Soviet-style legacy in the 1990's, a multi-insurer model was ruled out on the grounds that given Estonia's small population, effective competition between insurers would be impossible. Indeed, in comparison with countries like Czech Republic or Slovakia that introduced multi-insurer models, Estonia fares well in terms of lower administrative costs<sup>4</sup>. General health insurance covers about 95% of the population, 45% of whom are non-contributors (*i.e.* not working). The

4. In 2007, public administrative costs for the whole health system accounted for 2.6% of total health expenditure (NHA data). According to WHO the administrative costs are comparatively low: for other countries they ranged from 1.6% of total health expenditure in Hungary, 2.7% in Poland, 3.8% in the Czech Republic and 5.4% in Slovakia (WHO, 2009). This is a WHO concept used for international comparisons, but it serves well also for trend analysis. The latter is calculated as median food expenditure. Capacity to pay is then amount available for non-food spending. If actual food expenditure is lower than subsistence spending, then capacity to pay includes total non-food expenditure. See the following for details: Xu Ke (2005).



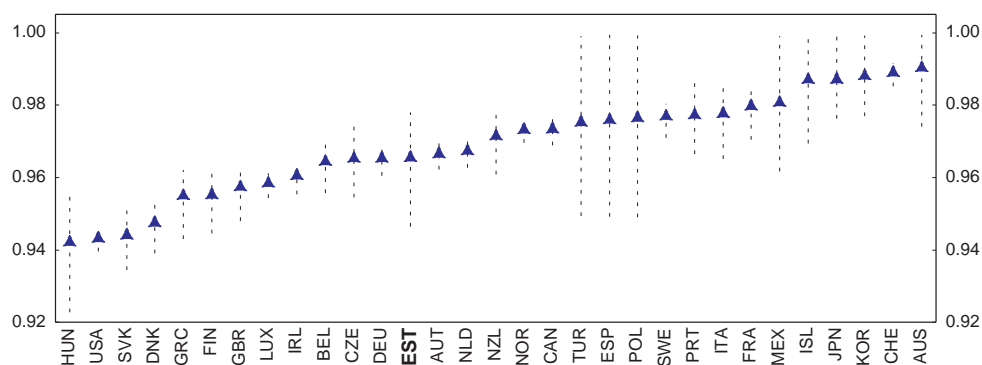
state makes contributions on behalf of some of them, notably the unemployed and parents on parental leave. In terms of scope, the insurance package has evolved somewhat over the time but is generally broad although it excludes dental care for adults and long-term care. Also, an elaborate system of user charges and drug co-payments is in place.

### **Public health spending funded by a social tax on labour and mainly via a health insurance fund**

The majority of public health spending is financed through the health insurance fund (EHIF), with some particular services funded directly by different levels of government. The EHIF is funded by an earmarked share of a social tax levied on labour income. It is obliged to have a balanced budget and to create reserves to account for unexpected developments in revenues, but is implicitly backed by the state. Employees and self-employed contribute 13% of gross wages, which is part of a 33% social tax and collected by the tax authority. A cap on income subject to contributions for the self-employed is in place, although it is at a relatively high level (15 times the minimum wage) and the introduction of a cap for employees has been under consideration. On top of this, about 10% of health financing passes through the state and municipal coffers. The Ministry of Social Affairs funds emergency care, ambulance services and public health programmes. Local municipalities cover non-emergency care for the uninsured. Capital costs were previously allocated directly from the state budget but more recently these are increasingly being funded via the EU structural funds.

**Figure 3. Relative efficiency of the health output of life expectancy, 2007**

Country score relative to most efficient score and 95% confidence intervals



*Note:* Scores were estimated using Data Envelopment Analysis (DEA) with two inputs (health care spending and a socio-economic/life-style measure) held constant and one output (life-expectancy at birth). Life-style factors were consumption of fruit and vegetables and lagged consumption of alcohol and tobacco. Estimates were corrected for bias and small samples using the bootstrap statistical technique. Scores should be interpreted as broad indicators of scope for efficiency gains and ranking. Methodological details are in Joumard *et al.* (2008), "Health Status Determinants", *OECD Economics Department Working Papers*, No. 627.

*Source:* OECD Secretariat estimates.

#### **Box 1. Main actors of healthcare system**

**Government** is the principal policy maker and regulator of the system. Its main goals and plans are outlined in the National Health Plan (2008), which covers the period to 2020 and targets increasing life-expectancy and general health conditions of the population. The government approves a basic benefits package and price list, usually once a year following a proposal of the Ministry of Social Affairs, on the basis of medical efficacy, cost-effectiveness, compliance with national health policy and availability of financial resources. The Ministry also plays a key role for drugs price setting. There are a number of state agencies such as the Health Board, Pharmaceutical committee, National Institute for Health Development and State Agency of Medicines that carry out various supporting tasks for the Ministry.

**Estonian health insurance fund (EHIF)** is the administrator of the system. It is a single insurer and main contractor of care. It carries out monitoring of providers, supplies the government with analysis for decisions about reimbursements and content of the coverage package. The fund is financed from a social tax levied on wages but is implicitly backed by the state, an arrangement that in theory gives an incentive to exceed the budget but so far no bail out has been needed. The EHIF operates through four regional branches. It is also responsible for part of the sickness insurance (the other part being a responsibility of employers) and the distribution of maternity benefits. The fund is governed by a 15 member supervisory board of representatives of the government and patients' organisations, chaired by the Minister of Social Affairs. In 2009 the EHIF's expenditure on health services accounted for 5.4% of GDP.

**Local governments** own hospitals and nursing care institutions, largely via foundations. They are primarily responsible for the provision of long-term care and cover non-emergency care for the uninsured.

**Hospitals** are legal entities in the form of limited companies or foundations, owned by either the state or local governments. The 2003 Hospital Master plan envisioned 19 active care hospitals throughout the country: 12 general and local hospitals (one in each county except for Tartu, Parnu and Harju, where central or regional hospitals are located), 4 central hospitals and 3 regional hospitals. The EHIF contracts health care with these hospitals in five year plans. Furthermore, there some 30 nursing care institutions and 7 privately owned hospitals, focusing largely on specialised care.

**General practitioners (family doctors)** operate typically in individual practices and serve a partial gate-keeping role. Family doctors are obliged to have no less than 1 200 and no more than 2 000 patients except for some rural areas and some islands. They are paid by a combination of a basic monthly allowance, a monthly age-adjusted capitation-fee per patient and fee for service. A recently introduced voluntary quality bonus focusing on disease and chronic conditions prevention has been taken up by a large share of GPs.

With 0.65 **pharmacists** per 1 000 population Estonia has the highest number of pharmacists in the Central European region and ranks on a par with Austria and Denmark. There are over 500 pharmacies and opening of a new pharmacy is regulated based on geographical location and population size since 2006. A large share of the market is concentrated in five pharmacy chains. Drug wholesalers cannot operate a pharmacy directly, but only through a subsidiary.

Source: WHO (2009, 2008), Habicht (2010).

Family doctors provide general primary care and serve a partial gate-keeping role. Consultations are free of charge during office hours and there is a privately paid fee for home visits. Nurses can also carry out home visits and consultations on an individual basis. Furthermore, there is a 24 hour primary care call centre that has proven popular ever since its introduction in 2005. Visits to specialists without a referral are possible but are not covered by the insurance. There are exceptions for patients with chronic conditions and for some specific professions such as ophthalmologists, dermatologists, dentists and gynaecologists. Family doctors have a fixed range for the number of patients, with a few exceptions for remote rural areas. There were 3.3 physicians and 0.86 GPs per 1 000 inhabitants in 2009, both close to the OECD average.

There has been a significant reduction in the hospital network already, but scope for more rationalisation remains. Targeted streamlining of the hospital network has been in place since 2000. An original government plan was for 19 hospitals with 2.2 beds per 1 000 inhabitants by 2015, but this was later on increased somewhat. Currently, there are 3.8 beds per 1 000 inhabitants and the number of county hospitals is still slightly above the targeted figure. A National Audit Office report highlights that the updated hospital streamlining plan does not reflect well changes in the society that have happened since the original plan was created. Rural patients increasingly use regional or central hospitals as opposed to their local facilities. The county hospitals seem in particular affected by this change. The hospital network offers scope for further streamlining and the authorities are currently working on reviewing it. In particular, some general and local county hospitals can be turned into health centers with emphasis on provision of outpatient and day care as well as nursing care services.

Meanwhile, falling demand in local hospitals raises issues of ensuring a consistent level of quality of care. The EHIF carries out internally some benchmarking of providers to address issues of quality, mainly by comparing the providers to national averages on indicators such as length of stay in hospitals or case-

mixed indices and more recently also in relation to other providers. Also clinical audits and development of clinical guidelines are underway. Given the small size of the Estonian healthcare market, international co-operation might also be an opportunity to improve the efficiency of the system and ensure consistent levels of provided care. Some of this is already underway, as the EHIF allows for some highly specialised treatments to be carried out abroad. In 2006, there were some 6 500 such cases and in 2009 this has increased to more than 22 000 cases. These were mainly treatments of highly specialised nature for which the service or its alternative doesn't exist in the country.

Diagnosis-related group (DRG) based contracts are used widely for paying healthcare providers. These have been gradually phased in since 2001 and the proportion of DRG payment for inpatient and day-care surgical cases has been raised to 70% recently, while 30% remains reimbursed based on services. The DRG payments were originally introduced following an unexpected dip in revenues in 1999, as the Estonian economy felt the impact of the Russian crisis, as well as in an effort to deal with continuous rise in fee-for-service costs that was out of line with price developments at the time. The EHIF contracts with licensed hospitals on a medium-term basis (three and five year contracts) which embody a price list set by the authorities and include indicators such as maximum waiting times and quality of care. WHO points out that although the provider pay system has been reformed and improved substantially, some perverse incentives remain. For example, case-based purchase of inpatient care doesn't encourage continuity of care among providers or levels of care. Moreover, care may not always be delivered at the appropriate level. About a half of the EHIF's budget is spent on specialist care, but only 8% on primary care. According to WHO there is also an issue of avoidable hospitalisation – *i.e.* cases that could have been avoided through better quality of primary outpatient care – which points to a need for improvements in the family doctors' services. The EHIF's own analysis illustrates the scope for improvement in the GP network. When looking at the relationship between hospital utilisation and GP visits, it found that the three counties with the highest hospitalisation rates have the lowest utilisation of GPs (WHO, 2010). The effectiveness of gate-keeping often depends on the ability of the primary care doctor to act as a good agent managing and co-ordinating the follow up of patient care, as well as on information available on the quality and prices of services supplied by the providers of secondary care.

### ***Rising out-of-pocket payments bring issues of accessibility***

Out-of-pocket payments (OOP) were introduced in 1995 and have evolved significantly since. While in the early 2000s there were co-payments for most doctors' visits, today regular GP consultations carry no OOP. Also, annual spending limits which qualify for additional reimbursement, have been introduced even though these stop at a relatively high threshold of EUR 1 278. Furthermore, the group of the population who are exempt from a number of OOPs has been reduced over time. Currently, children and pregnant women are exempt. Retirees, the disabled and children under 16 are not, although they were previously also part of this group and still get higher re-imburement rates for pharmaceuticals. A 15% co-insurance for inpatient nursing care has been introduced in 2010.

The importance of out-of-pocket payments as a source of financing has increased considerably. At the end of the 1990's they represented some 14% of total healthcare financing. By 2006, this has peaked at 25%, and it declined only slightly below 20% in 2008, which is the OECD average. This increase is also visible when looking at households' expenditure. In 2000, the share of OOPs in total household expenditure was on average just under 3%; then in 2007 it reached 5%, while the OECD average was 3.6%. OOPs are generally considered as a useful tool for curbing excessive demand and a large number of OECD countries have introduced them in some form. However, they raise issues of accessibility of care, which can have an impact on the general health status of the population. Should they result in postponing adequate and timely care in the early stages of an illness, which tends to be cheaper, such postponement can create additional costs for more sophisticated treatments later on. A large majority of OECD countries (with the exception of Mexico and Turkey) use policies to protect some population groups or the entire population from excessive out-of-pocket payments. Twenty-four countries exempt patients with specific medical conditions or disability, thirteen countries exempt seniors and the same number exempt pregnant

women. Another widely used option is setting up an upper limit in relation to household income, which is applied by seventeen OECD countries (Paris *et al.*, 2010).

In an analysis of OOPs impact on Estonian households, Võrk finds that over time they have become regressive and as a result certain groups have been pushed into poverty (Võrk *et al.*, 2009). Pensioners are most affected by the increases. The proportion of households with OOPs above 40% of capacity to pay has increased steadily, and in 2007 reached 3.3%<sup>5</sup>. This share of people paying so-called catastrophic expenditures for health is comparable to Korea and Mexico, even though this has to be taken with a certain caution as this data are based on a self reported questionnaire and a number of countries didn't report such national estimate (Paris *et al.*, 2010). Households can apply for social assistance at their local municipality. Municipalities are obliged to fund health care for the uninsured population and in fact some health care costs for the insured are also already being reimbursed. The city of Tallinn had a specific list of health expenditures eligible for compensations prior to the downturn while other municipalities deal with compensations for medical expenses on a case-by-case basis. However, availability of additional reimbursements varies across the country depending on actual financial situation of each municipality and as illustrated below, municipal budgets have come under strain during the downturn. Moreover, applying for additional social benefits might pose a social stigma. Introduction of a means tested cap on out-of-pocket payments should improve the situation of low income households and protect the chronically ill. Alternatively, this issue can be addressed under existing social benefits such as subsistence minimum.

#### Box 2. Out-of-pocket payments

**Outpatient care.** The biggest item of out-of-pocket payments is adult dental care, which is not covered by the insurance. Children and adolescents up to 18 years old are covered and there is a limited cash benefit for pregnant women and pensioners. When seeing a specialist contracted by the EHIF, a co-payment of up to EUR 3.20 is levied. Specialists not contracted by the fund can charge "reasonable" costs. Moreover, a specialist visit without a GP's referral is not covered by insurance. A GP's home visit is charged EUR 3.20, consultation within office hours is not charged. Emergency care is free of charge.

**Inpatient care.** A co-payment of up to EUR 1.60 per day is levied for a hospital stay (maximum 10 days per illness episode). Pregnant women, children and patients at intensive care units are exempt. Co-payments are charged for above-standard accommodation and for specific services such as inpatient rehabilitation of non-acute services. A co-insurance of 15% for nursing care was introduced in 2010.

**Pharmaceuticals.** Insurance covers fully only drugs used in inpatient care. For the rest there is a co-payment of EUR 3.20 per prescription and co-insurance of at least 50% of the price, and the EHIF doesn't reimburse more than EUR 12 per prescription. For chronic diseases, there is a co-payment of EUR 1.30 and co-insurance of 0-25%. Lower co-insurance payments apply for children and pensioners. Exceeding annual spending ceilings qualifies patients for additional reimbursements, but the patient has to apply. For expenditure between EUR 383-639, 50% reimbursement is available, for EUR 639-1 278, 75% is covered. Above this threshold there is no additional reimbursement available.

Source: Vork *et al.*, 2010.

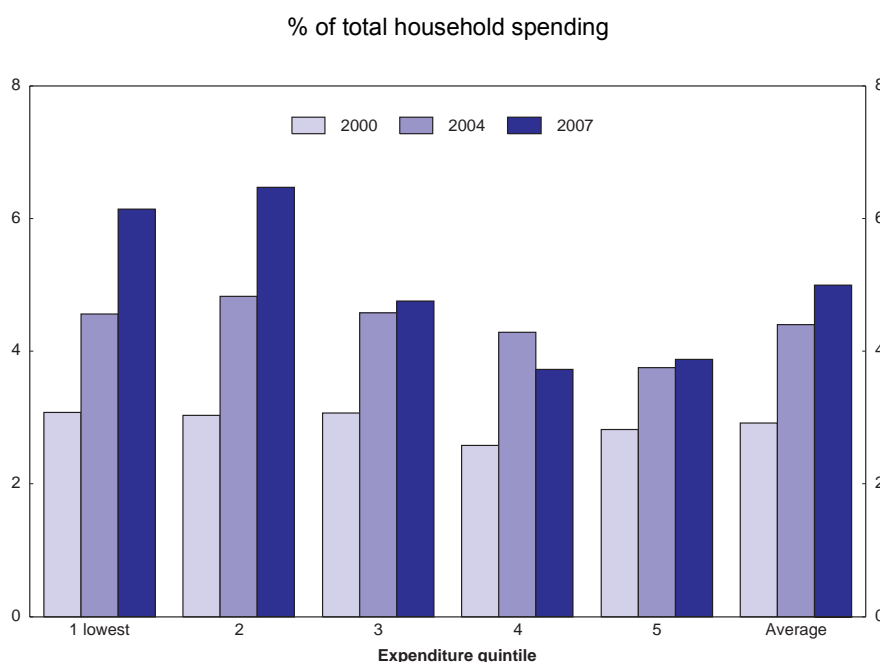
Drug expenditures represent some 10% of the EHIF budget and are households' largest share of out-of-pocket payments. Pharmaceutical costs are some 20% of total healthcare spending, somewhat above the OECD average of 17%. Various reimbursement categories exist, and the category can depend on whether a drug is prescribed by a general practitioner or a specialist. The effective co-payment (total co-payment divided by total drug spend by insurance) for reimbursed drugs stands at some 37%, which is comparable to Finland but high compared to other European countries. Co-payments for pharmaceuticals were introduced as early as 1993 and over the period of 1997-2006 the total expenditure on

5. Capacity to pay is defined as household income (or expenditure) above subsistence expenditure. Minimum subsistence levels currently stand at EUR 63 per month in a single person household and EUR 51 per person in multiple person household.

pharmaceuticals per capita has more than tripled and outpaced growth in its regional peers such as Finland and Sweden but also in countries like the Czech Republic (Kanovos *et al.*, 2009).

Several studies, including EHIF's own internal analysis, point to low use of cost efficient generic drugs in Estonia (WHO, 2010). Prescription in International Non-proprietary Name is compulsory for physicians unless there is a specific medical reason for a brand name. The pharmacies, until recently, were free to direct customers to specific products. Since patients pay the difference between the reimbursed and actual price, the EHIF wasn't really affected by such behaviour. However, pharmacies' exploitation of their information advantage over customers clearly constitutes a market failure, resulting in higher private spending on healthcare. In an attempt to tackle the issue, the government introduced a decree in March 2010, obliging the pharmacies to offer the least expensive drug available. Moreover, a public awareness campaign is currently under way ("Choose optimally priced medicine at the pharmacy") to improve awareness of the price choice patients are making when buying drugs. Yet anecdotal evidence shows that the cheapest reference drug is often not available in a pharmacy. The ownership structures of pharmacies' might be partly responsible. Although wholesalers are not allowed to own pharmacies directly, they can do so via subsidiaries. Thus some 80% of pharmacies belong to five of pharmacy chains and buy their supplies from two major wholesalers in the country (Koppel *et al.*, 2008. Also, existing regulations on opening of new pharmacies could also play role<sup>6</sup>. The pharmaceutical market is currently under investigation by the Competition Authority.

**Figure 4. Out of pocket health payments by expenditure distribution**



*Note:* Expenditure is consumption expenditure and excludes donations, monetary gifts, etc. The graph shows out of pocket payments as a percentage of household spending for each spending quintile.

*Source:* Statistics Estonia, *Estonian Household Budget Survey* microdata and calculations by Andres Võrk, University of Tartu.

6. A new pharmacy can be opened only when an existing one closes down. In terms of pharmacists per 1 000 population, with 0.65 Estonia already ranks high among peers such as Lithuania (0.64), Czech Republic (0.58), Poland (0.58) and Sweden (0.60) but below Finland (1.55). Based on 2006 or latest available year WHO data.

A distinctive feature of the Estonian health care system is digitalisation. Implementing ICT tools in healthcare systems across OECD countries can improve allocative efficiency by decreasing the use of health services – particularly expensive hospital care – through better co-ordination between primary and secondary care. There is also scope for improvements in technical efficiency such as preventing duplication of laboratory and diagnostic tests and preventing medical errors that can be extremely costly (Paris *et al.*, 2010). With the Estonian central authorities eager for IT-savvy solutions, a project for introducing a national database of medical documents has been on the agenda since 2003 and with some delay it finally got under way in 2008 building three databases (electronic health records, digital registrations, and digital imaging databases). The take-up rate among providers has been high since the systems are mandatory. Yet, the active use rate is somewhat more modest as it stood at some 30% and over 13 000 individuals accessed the patients' portal in 2009. The latest stage of this e-health approach is an electronic e-Prescription system launched in 2010, where prescribed drugs are stored in a national database that is accessed both by doctors and pharmacies for dispensing the drugs. Although the system suffered some teething problems at the beginning of the year and had to be temporarily suspended, it should significantly improve information gathering on drugs consumption and prescription. In this regard, it can significantly help to monitor prescribing patterns of doctors and dispensing by individual pharmacies. These should be systematically analysed to enforce wider use of the least expensive drugs.

### ***Low pay and working conditions in the health care sector***

The authorities see shortage of labour in healthcare as one of the main challenges. While the number of practicing physicians in Estonia (3.4 per 1 000 inhabitants) is just above the OECD average, there are only 6.4 nurses per 1 000 inhabitants compared to the OECD average of 9 in 2008. This can be partly explained by remuneration. Doctors earn about double the national average wage, while nursing staff earn only slightly above the average (Figure 5). The growth of the remuneration in the health care sector has been somewhat faster than the average in the economy in 2002-08. However, prior to the downturn there have been tensions over pay and it is likely that wage pressures will return with improving economic outlook. Currently, an agreement on minimum wages of nursing staff is in place. Remuneration in the medical sector is linked to the budget constraints of the health insurance fund, which saw an overall 2-4% decline in prices of health care services for 2011. To some extent Estonia suffers from the close proximity of the Finnish market, which offers better remuneration and poses relatively low language barriers<sup>7</sup>. Attractiveness of better pay abroad is part of the problem, but it doesn't seem to be the only explanation. It is estimated that only some 4% of doctors and 2% of Estonian nurses work abroad, not very high ratios in international comparison. Domestic opportunities for better paid jobs elsewhere in the healthcare sector play a role. Moreover, working conditions also matter and the authorities point out difficulties in attracting adequate staff in particular to rural areas.

The authorities are targeting an increase in medical staff and over the next decade plan for health personnel to stabilize at 3 doctors and 8 nurses per 1 000 inhabitants. Supply is to be boosted thru more state-commissioned study places in medical programmes at the University of Tartu, both for physicians and nursing staff. Other contributing factor to the low number of nursing staff could be demand driven. There is a prevalence of a doctor-centred care, where patients seek doctor consultations and nurses' role has been so far rather limited, while some of the medical tasks could be carried out by well qualified

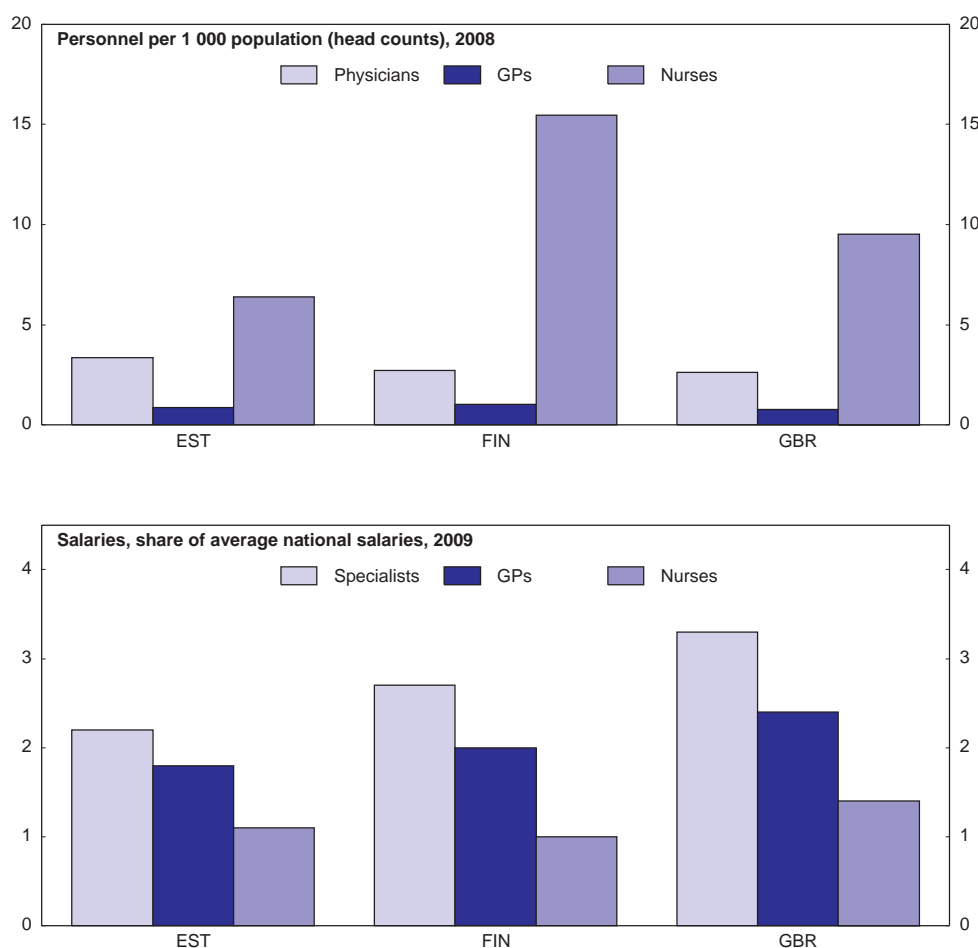
---

7. The remuneration of GPs in OECD ranges from 1.4 times the average wage of all workers in Hungary, to 4.2 times in the United Kingdom. In most OECD countries, the remuneration of nurses is above the average wage. This is particularly the case in Mexico, where the income of nurses is more than two times greater than the average wage. In Portugal, it is 70% higher. On the other hand, the income of nurses is lower than the average wage in Hungary, Slovak Republic, Czech Republic and Finland. In Finland, the growth in the salary of nurses lagged behind the growth in the average wage between 2000 and 2007, but in 2008, nurses have obtained a substantial pay raise which has somewhat narrowed this gap.

nursing staff thus making the system more cost efficient. The authorities are pursuing possibilities to facilitate such shift in care. As mentioned above, the nurses can conduct home visits and consultations already. Furthermore, there is a plan to allow them to prescribe a limited number of drugs.

Prevention and health promotion can also to some extent contain demand for future health spending and improve health status of population. OECD countries spend about 5% of health care expenditures on government programs for health promotion and disease prevention (OECD, 2010b). Estonia spent some 3% of total health care expenditure on prevention in 2007 and during the downturn this funding has been cut to 2.6% in 2009. Main risk factors leading to ill health of the working age population are related to tobacco use, alcohol consumption, low levels of physical activity and unhealthy nutrition (Habicht and Ginnecken, 2010). Thus campaigns promoting healthier lifestyle addressing these issues could bring potential future savings, although the evidence on this has been so far somewhat limited (OECD, 2010c). Most health promotion and prevention funding goes via the Ministry of Social Affairs, but other bodies such as Ministry of Justice and local municipalities also fund certain health prevention and promotion activities.

**Figure 5. Staff and salaries**



*Note:* Personnel numbers usually refer to practising personnel, *i.e.* those who provide services directly to patients. Number of nurses in Finland refers to 2007 and includes nurses active in health care. Personnel salaries refer to all full-time salaried personnel and nurses are hospital nurses. Salaries in the UK are for England only and refer to 2007. Salaries for UK GPs refer to full-time and part-time. Refer to Source for further details.

*Source:* OECD Health Data 2010, October 2010.

## **Fragmented local government in need of reform**

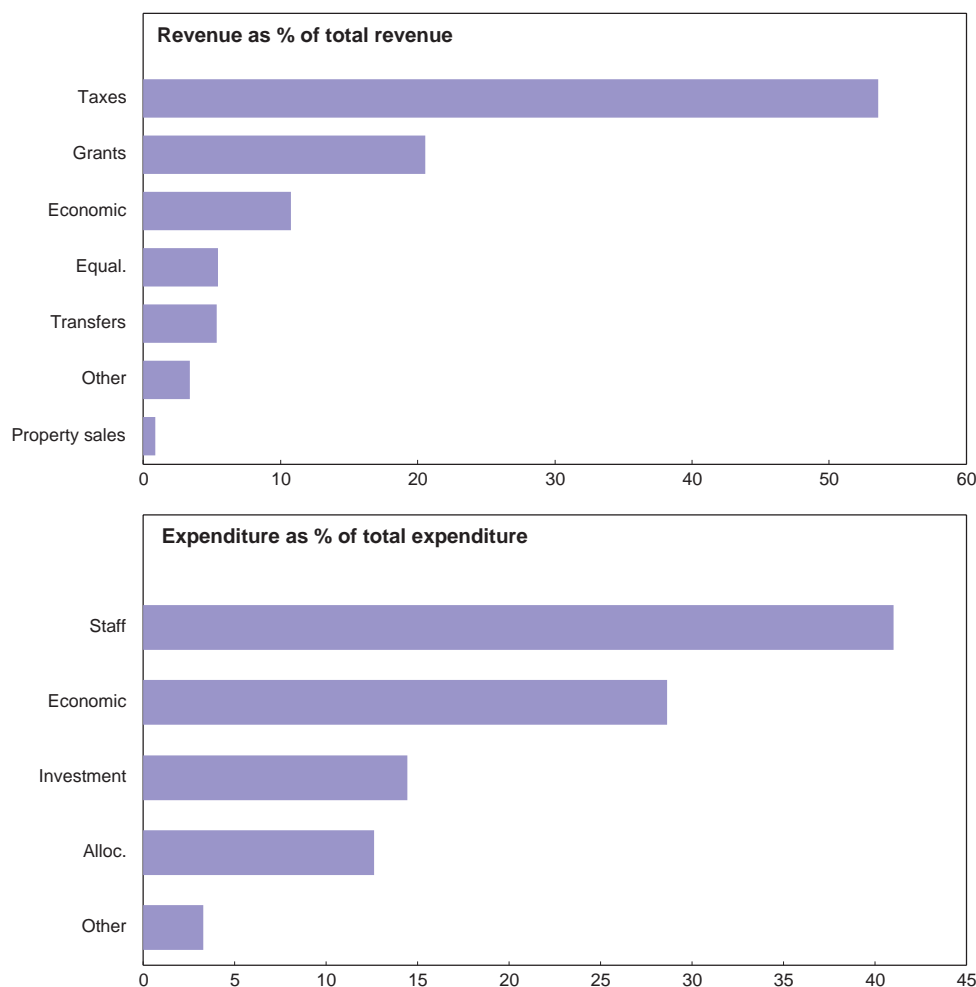
With over 200 municipalities and 15 counties, Estonia has an extensive network of local government and administration, considering its population size of only 1.3 million. There are 226 elected local governments – 33 towns and 193 rural municipalities. Half of them have a population of under 2 000 inhabitants and two-thirds under 3 000. Local government has experienced something of a renaissance over the past decade as the central government has devolved a number of duties and responsibilities. Currently, about one quarter of general government spending passes via local governments, about 10% of GDP, and they carry out some 25% of public investment. The share of sub-central expenditure in total government expenditure varies widely across OECD countries. In Canada, sub-central governments account for over 60% of the total expenditure, in Greece it is only about 5%. Between 1995 and 2005, this share has increased from 31 to 33% on average in the OECD, with the majority of the countries decentralising (Blöchliger and Petzold, 2009). Local governments in Estonia account for about a half of the general government debt and deficit, even though with debt at 4% of GDP, this is small. Local municipalities run no less than 380 companies and foundations, whose revenues amounted to EEK 7.3 billion, 3.3% of GDP in 2009.

The recession has increased local government deficits and debts across most of the OECD due to a “scissors” effect, which results from falling tax revenues and increasing demand for welfare services. During the downturn, Estonian local governments experienced a decrease of resources both as a result of lower income tax revenues and because the sharing arrangements for such revenues was altered. In 2009, local governments ran a deficit of 0.4% of GDP and in the medium term are expected to have a slightly negative balance of 0.2% GDP. Although local governments are constitutionally independent, in the current framework they have only limited revenue raising possibilities and are financially largely dependent on the central government. Municipalities are principally responsible for provision of public services and infrastructure, primary and secondary education, social care and welfare services and local public transport. Furthermore, they maintain pre-school care and numerous facilities for leisure such as libraries, sport grounds, museums but also long term care facilities for the elderly. In a number of these areas they act mainly as paymasters, in that they in effect disburse central government funds.

In addition to the municipalities, there are 15 county offices run by representatives of the central government, serving primarily administrative and co-ordination purposes. A county governor is appointed for a five year term and is agreed upon with the local governments. He is in charge of co-ordination of various state agencies within the county (such as public unemployment offices), economic and spatial development of the county and oversight of the local governments. Various central government institutions divide the country into various administrative units that do not necessarily correspond to the counties. For example, the health insurance fund has four regional branches that manage and supervise care across the country, and the Ministry of Justice also applies four administrative areas for its purposes.

A local government unit is headed by a municipal council that has a minimum of seven and up to sixty-three members depending on the population size. The council appoints a mayor and executive. Until 2005 there was a three year election cycle, but currently local government elections take place every four years. Representatives of the municipalities play a specific role in national politics. If the parliament doesn't succeed in electing the president, the head of state, municipalities step in. This arrangement gives them political clout on the national level, and especially as parliament has not succeeded in electing the president directly for some time now.



**Figure 6. Composition of local government revenue and expenditure, 2009****Note:****Revenue:**

Grants	Grants from State Budget
Economic	Income from economic activities and property
Equal.	Equalization fund
Transfers	Transfers from foundations and NGOs.

**Expenditure:**

Staff	Wages with taxes
Alloc.	Transfers to other entities
Economic	Operating expenses excluding wages.

Source: Ministry of Finance.

***Limited revenue raising opportunities***

As noted above, local government finances are to a large degree dependent on the central government budget. Revenues from taxes represent about a half of their budgets. While this is also true on average in OECD countries, for individual countries this ranges from 90% in Iceland to 13% in the Netherlands. Other revenue sources of Estonian municipalities come from economic activities and the central government via equalisation fund or grants. The core of the local government financing is based on sharing of personal income tax (11.4 of 21 percentage points goes to municipalities). However, since tax deductions are taken into account at the central government level, the local governments receive about 80% of personal income tax revenue. They also receive revenues from a modest land tax, where they have a certain degree of freedom to impose the rate within a range given by the central authorities (1 to 2.5%)

and to waive the tax for pensioners and land under dwellings. However, the land evaluation hasn't been updated since 2001. Revenues from the land tax vary across the individual municipalities but overall make up under 4% of total municipal revenues. In principle, there are other local taxes but these are not much used. Municipalities can impose the following taxes (number in a bracket indicates how many of them actually do so): sales tax (3), boat tax (1), advertisement tax (47), road and street closure tax (15), motor vehicle tax (1), animal tax (1), parking charge (9), entertainment tax (0). In case of the sales tax that has been recently imposed also by the capital Tallinn during the downturn to compensate for the drop in revenues there is an upper limit set by the central authorities, as it cannot exceed 1% of the value of the goods and services. Moreover, as of 2012 this local tax will be abolished altogether. Collection of local taxes has to be either agreed upon with the central tax authority or done by the municipalities themselves, which can impose another effective constraint. Fees and profits from property sales or natural resources also represent a source of income for municipalities and these are significant mostly in oil-shale mining areas.

Indeed, across the OECD income tax followed by property taxes and consumption taxes are most used as sources for sub-central governments, as they make up around 95% of their tax revenue. In most English-speaking countries property taxes account for most of the local taxes, while in Scandinavian countries the personal income tax tends to be almost the sole tax source for municipalities. For the OECD area as a whole, the share of indirect taxes for local government financing has increased with most of this coming as a result of tax sharing arrangements where the sub-central government units have only a little taxing power. Resource allocation tends to be improved when local government spending is covered by own tax revenue. Such an arrangement makes local governments more responsive to citizens' preferences. It improves budget management as citizens become more aware of direct costs of publicly funded services and those benefiting from the services decide on the taxation levels and pay the bill. It also incentivises the local governments to think about growth-oriented economic and fiscal policies, since they can fully and directly reap benefits of their actions.

Transfers from the state budget come in two basic forms, conditional block grants and unconditional equalisation funds. Block grants are allocated for specific functions. Allocations for primary and secondary education represent the largest item and they cover teachers' salaries and capital grants for renovation of schools. As in other OECD countries, there is an equalisation mechanism for the transfers from the state budget. This is applied if expenditures exceed revenues and covers 90% of the missing resources gap (see Box 3). Currently some 200 municipalities are said to receive such equalisation grants. The decision on the amount of money available for the equalisation fund is negotiated annually between the central and local government representatives, and it is linked to the overall situation of the central government budget. In the past, both the equalisation coefficient and the personal income tax sharing arrangement have changed; most recently in 2009 when the portion of the personal income tax revenue allocated to the municipal budgets was reduced by 5%. Such changes in financing arrangements can at times make long-term financial planning at the local level difficult. Furthermore, the current mechanism does not encourage municipalities to cultivate their own revenues by encouraging local economic development.

### **Box 3. Equalisation mechanism**

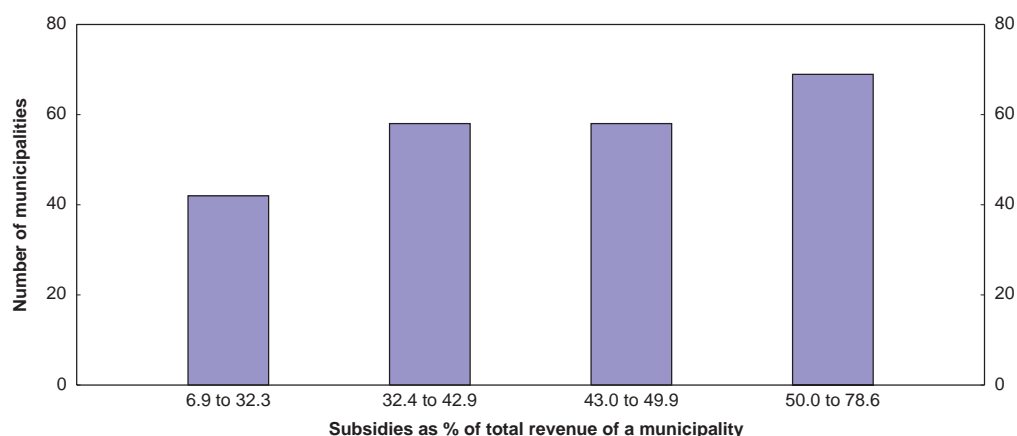
The equalisation formula currently covers 90% of the difference between normative revenue and expenditure. Normative revenue level is calculated as: *i*) personal income tax receipts for last three years multiplied by an income tax growth rate coefficient; *ii*) sum of land tax at a rate of 1.25%; and *iii*) charges for use of natural resources in last three years. Normative expenditures are calculated on a basis of population structure (children between 0-6 and 7-18 years old, numbers in the workforce, numbers of people 65 years and older), length of road infrastructure and the number of people in palliative care. A gap between thus defined revenues and expenditures is covered by 90% from the state budget's equalisation fund.

Most municipalities receive transfers from the equalisation fund. Only the capital Tallinn and some municipalities

around it (Harju region) and with Ida-Viru region, where incomes from oil-shale mining are substantial, have the normative revenues higher than expenditures. These are excluded from the calculations. The overall amount available for the equalisation fund is negotiated yearly between the government and representatives of the municipalities. It accounted for 6% of local government revenue in 2009. The equalisation fund varies depending on the position of the central budget.

Source: Friedrich *et al.* (2009); Kriz (2009).

**Figure 7. Distribution of subsidies in local government revenue, 2008**



Source: Ministry of Finance; Statistics Estonia.

Even during the boom years, municipalities were mostly running modest deficits. Moreover, since 2005 their debt has almost doubled, although in international comparison, it is still very small in terms of GDP, at 4% while in both Finland and Sweden the figure stands around 6% of GDP, close to the average for EU16. Some have argued that the numerous responsibilities passed onto the local level have not been matched by adequate resources (Friedrich *et al.*; Jauhiainen, 2008). A recent Constitutional court ruling on the need to better specify earmarked allocations for fulfilling the state delegated tasks from other transfers highlights the ongoing tensions between the central government financing and local municipalities' budgets. This decision led to the establishment of a ministerial committee that identified only a small number of tasks that are not fully covered by the transfers, and these are to be covered in the 2011 budget. In any case, there is a formal consultation process in place for the allocation of new competencies, as according to the law they have to be agreed upon with the municipalities.

### ***Tight budgets and borrowing restrictions***

There are explicit borrowing constraints for local governments. Municipalities can take out loans, leases or issue debt securities and obligations, but only within a limit and for the purposes of an investment specified in their development plan. Restrictions apply on both the total amount of such debt and its interest payments. The total amount of debt cannot exceed 60% of the planned annual budget revenue (not including the earmarked grants from the central government budget). At the same time, interest payments cannot exceed at any given year 20% of revenues (less the pre-specified state transfers). Moreover, only budgetary revenues can be used as debt collateral, not real estate or other assets. Ministry of Finance has to be notified of the situation in each municipality and if these rules are broken it can suspend the transfer of funds to a municipality until the situation is remedied.

In response to the recent downturn and euro entry, lending possibilities have been temporarily tightened further. Between 2009 and 2011, borrowing can be used only for covering financing gaps for the EU's structural funds and other international assistance financing. Any such action has to be approved by the Ministry of Finance and, if not adhered to, can result in a suspension of transfers. During 2009 over half of municipalities asked for permission to take out a loan in order to fulfil financial obligation related to absorption of structural funds. However, this general rule will be altered as of 2012 to allow for a more differentiated approach. An amendment passed this year will allow for an individual debt limit for each local government, in the range of 60-100% of its revenue, set by the Ministry of Finance and this should also include municipal companies. Moreover, local governments will be obliged to prepare four year budgetary strategies. As mentioned above, local municipalities run a large number of companies and foundations and these are sometimes used as vehicles to get around the borrowing restrictions. While foundations are most active in the healthcare sector, the companies provide public utility services. The National Audit Office pointed out recently that a financing scheme whereby a loan is taken by a municipal company for the purpose of preventing an increase of the local authority's debt burden is fairly widespread. The repayments for such loans are later on reallocated from the municipality's budget (NAO, 2010).

Since municipalities are responsible for the same set of services regardless of their size, there is a strong concern both at the central and local level about adequate capacity to ensure quality when delivering the public services, in particular for the smaller municipalities. A number of OECD countries face similar issues of local government management, and municipal consolidation is often at the heart of the debate. Implementing such a reform is not easy, due to both often strong local resistance in the name of local identity as well as technical difficulties in determining the "optimal" size of new units. Moreover, even if mergers in theory lead to economies of scale, the evidence of efficiency gains can be mixed and often it is the quality of service that is identified as the biggest gain.

### ***Previous reform efforts unsuccessful***

The central government has attempted a number of times to reform the existing system in order to address the issue of fragmentation and the small size of individual units. There was a proposal for a significant reduction in the number of municipal governments as recently as May 2009, in the context of the worsening financial situation and diminishing revenues. The proposal was to replace the existing structure with 15 larger local governments (on the basis of the existing counties) together with the five biggest towns keeping their current governing structures. However, the plan didn't go through and it is unlikely that the issue will be tackled again before the next general elections. Earlier proposals focused on a minimum population requirement of 3 500 residents per unit, with 4 500 in city areas, and aimed at decreasing the number of municipalities by half. A financial incentive was introduced in 2004 to cover up merging costs. Some 27 municipalities have merged since these incentives were introduced and overall since the early 1990s some 60 municipalities have merged. In an analysis of merging prospects Sootla (2009) finds that due to the small size of many rural municipalities, they continue to be run by local elites for extended periods since they are able to obtain an overwhelming majority in local elections. This means both more stability and more experience at attracting central government grants. But it also translates to a certain form of rivalry among municipalities for scarce central government finances, thus undermining the incentives and willingness for co-operation and merger (Sootla *et al.*, 2009).

### ***Horizontal co-operation developing***

Horizontal co-ordination and co-operation is the other way forward and to a certain extent this is already happening, via joint public service provision in areas such as waste management, transport or social and health care. A number of OECD countries are increasing co-operation among local governments and creating framework conditions for doing so. For example in Switzerland, where municipalities and cantons enjoy a relatively large autonomy, local governments have formed a private company that helps

them to tap into bond markets. On the other hand in Denmark, such activity is organised by a public entity. A similar feature already exists in Estonia in the field of public procurement. A non-profit organisation formed by some local governments and the private sector concentrates the experience in public procurement tendering, but using its services is voluntary.

OECD countries use performance measurement systems in order to structure co-ordination both vertically and horizontally among levels of government. In Estonia, financial monitoring is carried out by the Ministry of Finance (the state of municipal finances is available on a monthly basis on the Ministry's website). The National Audit Office established a special unit focusing on local governments in 2006 and the Statistical Office also publishes descriptive annual reports on local governments. Furthermore, the Ministry of Social Affairs has been working on an annual data collection on social services provision and the Ministry of Interior has commissioned a study on a local government capacity indicator. Although primarily descriptive of the geographical, demographic and institutional features, the indicator confirms varying availability of services across the country and that municipalities with a population of over 5 000 tend to perform better than the smaller ones.

#### **Box 4. Local government reforms in the region**

**Finland**, one of the most decentralised countries within the EU, has imposed minimum service requirements in 2007 as a part of a larger local government reform (PARAS) with a clear goal of encouraging economies of scale (OECD, 2008, 2010e). This notion is based on a voluntary co-operation or mergers with neighbouring municipalities. The trigger for the reform was a need to address a demographic challenge of northern and eastern municipalities that are losing population as younger people move to urban centres while the older generation remains requiring specialised and high quality services. Given that municipal governments are the main providers of health care and elderly care services, these demographic trends threatened municipal financial sustainability as well as capacity to provide adequate basic public services. Different minimum population size has been set for various public services provision and wider co-operation plans on land use, housing and transport. For example, 20 000 inhabitants for primary health care and social services, 50 000 for vocational and basic education. This has been accompanied by financial merger grants of EUR 2 million to 19 million to those that merge between 2008-13 and a possibility of a cut in transfers from the central government for those who do not merge. So far, given that the mergers are still a voluntary option, it has resulted in a considerable decrease of almost 20% in the number of municipalities from 415 to 342 in 2010.

Probably the boldest local government reform in the region has been carried out by **Denmark** in 2007 cutting the number of municipal units from 270 to 98 while reorganising responsibility for health care to five newly created regions. Denmark is a traditionally decentralised country, with a general consensus on the importance of local democracy. Also, voluntary horizontal co-operation had a long history but was often criticised for a lack of transparency and democratic control. Following two previously-failed attempts, this reform has received a strong backing from the central authorities and was carried out relatively fast. It transferred healthcare to the newly formed regions, while municipalities remain responsible for most of welfare tasks and the central government was given a clearer role of overseeing efficiency of services provision at both of the sub-levels. This was accompanied by a new financing and equalisation system.

On the reform process itself, the notion was launched with a commission that assessed whether the existing decentralised system matched the current needs of the population. Its report recommended a total reform of the public sector, including a change in boundaries and reallocation of tasks between the centre and other tiers of government. After a series of public hearings and discussions with the municipalities, the local governments had to take part in a "controlled voluntary process" whereby they could choose with whom they wanted to merge in order to reach a minimum population threshold of 20 000 inhabitants. The government had to intervene in only two cases, but it was important that it could have intervened anyway. There were also a number of carrots and sticks applied, for example a guarantee that no public official would lose a job in the first year of implementation and those who did not reach required population size would not be given new tasks that were transferred to the local governments and would have to conclude compulsory service agreements with their neighbours.

A general overview of political economy of ten fiscal federalism reform episodes in nine OECD countries (Australia, Austria, Belgium, Canada, Denmark, Finland, Portugal Spain and Switzerland) between 2001 and 2009 found that since institutional framework shaping fiscal relations and powers of sub-central governments are country specific and so are the reform paths (OECD, 2011). However, some common features had been identified from the

county-specific experiences. Notably, different government levels do not always have antagonistic interest and often the dividing line runs between wealthy and poor municipalities. Electorate mandate for reform of local governments are important, but not crucial. Reforms often build on earlier attempts and pilot programmes, and most of them consisted of bundling of several elements such as fostering efficiency with increased redistribution. Expert panels operating outside the direct influence of the administration were often considered as a precondition for a successful reform while consultation and involvement of major stakeholders should concentrate on principles. In a number of cases transitional compensations proved necessary as a measure to reduce opposition and forge majorities for support of the reforms. Furthermore, political leadership support tends to accelerate reform with its credibility increasing when the politicians driving the changes have no direct stakes in the reform.

*Source: Reforming Fiscal Federalism and Local Government: Lessons From Ten Country Studies (OECD, 2011, forthcoming), OECD Economic Survey of Finland (2008, 2010).*

Financing mechanism can play an important role in encouraging local governments' co-operation or even mergers. OECD countries apply various schemes of municipal financing. One possibility is a separation of the equalisation mechanism of revenues and costs and involving municipalities financially in those arrangements as is done in Sweden or Finland. Tightening the equalisation scheme is another option and in the Estonian context looking at real costs as well as normative ones could help. Reviewing the existing earmarking and block grants would be warranted in order to ensure that there are no overlaps. The equalisation formula itself can have built-in incentives for increasing the population size as coefficients for tax sharing arrangements can be differentiated for very small population sizes. Maintaining such a large number of small local governments is ultimately only a second best solution and the experience from neighbouring countries in imposing minimum population requirements for provision of a number of public services is fairly telling.

#### **Box 5. Recommendations on public sector efficiency**

##### **Realising efficiency gains in the healthcare system**

- An update of the hospital network plan for active treatment should reflect changing healthcare consumption patterns of the population.
- The authorities need to remain vigilant on issues of quality of care and consider developing a wider system of quality indicators, looking also into a broader international context for establishing these benchmarks and co-operation for specialised care.
- The role and importance of primary care should increase by boosting the responsibilities and oversight of family doctors.
- Introduction of a means tested cap on out-of-pocket payments should improve the situation of low income households and protect the chronically ill. Alternatively, this issue should be addressed under existing benefits such as the subsistence minimum. Adequate accessibility of healthcare, in particular dental care, for financially distressed households needs to be ensured.
- Continue with the promotion of generics and least expensive drugs both among patients as well as doctors. Monitor prescribing and dispensing patterns to identify scope for improvement; disseminate information on best practices for physicians and pharmacists; investigate those that deviate excessively from norms. Contracts with the national health insurer for non-complying providers should then be reconsidered. Oblige pharmacists to always supply the cheapest generic drug. Moreover, the authorities need to be vigilant in safeguarding competition among the pharmacies.
- Reviewing existing remuneration in the health care sector with a view to increasing wages, in particular for nurses, as well as improving general working conditions will be inevitable.

##### **Re-thinking sub-national government**

- Reform local governments either by merging or requiring greater co-operation; in this context, consider imposing minimum population requirements.
- Strengthen the revenue raising possibilities by providing the local municipalities with more scope for setting the land tax. One possibility for enlarging its revenues is to bring buildings into the tax base.
- Develop further indicators and monitor quality standards of public service provision to help to build up an argument for consolidation of local government, especially for those municipalities that would be underperforming.
- Tightening the equalisation scheme is another option and in the Estonian context for example looking at real costs as well as normative ones set uniformly by the central government could help. Reviewing the existing earmarking and block grants would be warranted in order to ensure that there are no overlaps.

## BIBLIOGRAPHY

- Afonso, A., L. Schuknecht and V. Tanzi (2006), “Public Sector Efficiency: Evidence for New EU Member States and Emerging Markets”, *ECB Working Papers*, No. 581.
- Blöchliger, H. and O. Petzold (2009), “Taxes or Grants: What Revenue Source for Sub-Central Governments?”, *Economics Department Working Papers*, No. 706, OECD, Paris.
- Convergence Programme 2010, Ministry of Finance, Tallinn.
- Estonian Health Insurance Fund (2009), *Overview of Estonian Experiences with DRG System*, Tallinn.
- Estonian Health Insurance Fund (2010), *2009 Annual Report*, Tallinn.
- European Commission (2009), *2009 Ageing Report: Economic and budgetary projections for the EU27 Member States (2008-2060)*.
- Friedrich, P., WN. Chang and R. Janno (2009), “Local Fiscal Equalisation in Estonia: Is Reform Necessary?”, *CEifo Working Papers*, No. 2800, September 2009.
- Habicht, J. and E. van Ginneken, “Estonia’s Health System in 2010: Improving Performance While Recovering From a Financial Crisis”, *Eurohealth*, LSE Health and European Observatory on Health Policies, Vol. 16, No. 2, London.
- Joumard, I., Ch. André and C. Nicq (2010a), “Health Care Systems – Efficiency and Institutions”, *Economics Department Working Papers*, No. 769, OECD, Paris.
- Joumard, I. *et al.* (2010b), *Health Care Systems: Efficiency and Policy Settings*, OECD, Paris.
- OECD (2010a), *OECD Economic Surveys: Finland*, OECD, Paris.
- OECD (2010b), *Health at a Glance*, OECD, Paris.
- OECD (2010c), *Value for Money in Health Spending*, OECD, Paris.
- OECD (2010d), *Social Policy and Labour Market Review*, OECD, Paris.
- OECD (2010e), *OECD Economic Surveys: Finland*, OECD, Paris.
- OECD (2008), *OECD Economic Surveys: Finland*, OECD, Paris.
- OECD (2011), “The 2007 Local Government Reform in Denmark”, in *Reforming Fiscal Relations, Lessons from OECD Countries*, OECD, Paris, forthcoming.



- OECD (2011), *Reforming Fiscal Federalism and Local Government: Lessons From Ten Country Studies*, OECD, Paris, forthcoming.
- Oliviera Martins, J. and C. de la Maisonneuve (2006), “The Drivers of Public Expenditure on Health and Long Term Care: An Integrated Approach”, *OECD Economic Studies*, No. 42, pp. 115-154, OECD, Paris.
- Kanavos, P. *et al.* (2009), *Review of the Estonian Pharmaceutical Sector: Towards the Development of National Medicines Policy*, WHO, Copenhagen.
- Koppel, A. *et al.* (2008), “Estonia – Health System Overview, Health Systems in Transition”, Vol. 10, No. 1, WHO, Copenhagen.
- Kriz, K.A. (2008), *Local Government Finance in Estonia, in Local Public Finance in Central and Eastern Europe*, Edward Elgar Publishing.
- Loikkanen, H. and I. Susiluoto (2005), “Cost Efficiency of Finnish Municipalities in Basic Service Provision 1994-2002”, *Urban Public Economics Review*, No. 4.
- Lotz, J.R. (2006), “Municipal Amalgamations and Economies of Scale, some Danish Evidence”, paper presented at the OECD workshop on efficiency of sub-central government spending, 19 May 2006, OECD, Paris, [www.oecd.org/dataoecd/57/62/38270080.pdf](http://www.oecd.org/dataoecd/57/62/38270080.pdf).
- Ministry of Interior (2005), *Local Government in Estonia*, Tallinn.
- Mölder, M. and V. Pettai (2010), “Nations in Transit 2010: Estonia”, Freedom House, [www.freedomhouse.org/images/File/nit/2010/NIT2010Estoniafinalfinal.pdf](http://www.freedomhouse.org/images/File/nit/2010/NIT2010Estoniafinalfinal.pdf).
- National Audit Office (2010), “Putting Off Decisions Regarding Hospital Network Harms the State Interest”, Press release, Tallinn.
- National Audit Office (2010), “Municipal Companies Need a Goal”, Press release, Tallinn.
- Paris, V., M. Deveaux and L. Wei (2010), “Health Systems Institutional Characteristics: A Survey of 29 OECD Countries”, *Health Working Papers*, No. 50, OECD, Paris.
- Sootla, G., L. Kalev and K. Kattai (2009), “Perspectives of Local Government Amalgamations in a Transition Society: The Case of Estonia”, *Studies on Transition States and Societies*, Vol. 1, Issue 1, Tallinn.
- Sutherland, D. *et al.* (2007), “Performance Indicators for Public Spending Efficiency in Primary and Secondary Education”, *OECD Economics Department Working Papers*, No. 546, OECD, Paris.
- Thomson, S. *et al.*, (2010), “Responding to the Challenge of Financial Sustainability in Estonia’s Health System”, WHO, Copenhagen.
- Vörk, A., J. Saluse and J. Habicht (2009), “Income-Related Inequality in Health Care Financing and Utilisation in Estonia 2000-2007”, *Health Financing Technical Report*, WHO, Copenhagen.

## WORKING PAPERS

*The full series of Economics Department Working Papers can be consulted at [www.oecd.org/eco/workingpapers/](http://www.oecd.org/eco/workingpapers/)*

880. *How to move Product Market Regulation in New Zealand back towards the frontier*  
(July 2011) by Paul Conway
879. *Financial sector reform in India: time for a second wave?*  
(July 2011) by Richard Herd, Vincent Koen, Ila Paitnak and Ajay Shah
878. *Policies to rebalance housing markets in New Zealand*  
(July 2011) by Calista Cheung
877. *The sharing of macroeconomic risk: Who loses (and gains) from macroeconomic shocks*  
(July 2011) Rudiger Ahrend, Jens Arnold and Charlotte Moeser
876. *Estonia: making the most of globalisation*  
(June 2011) Robert Price and Andreas Wörgötter
875. *The effects of downturns on labour force participation: evidence and causes*  
(June 2011) Romain Duval, Mehmet Eris and Davide Furceri
874. *A dynamic factor model for world trade growth*  
(June 2011) Stéphanie Guichard and Elena Rusticelli
873. *Towards a better understanding of the informal economy*  
(May 2011) Dan Andrews, Aida Caldera Sánchez and Åsa Johansson
872. *Tax competition between sub-central governments*  
(May 2011) Hansjörg Blöchliger and José-Maria Pinero-Campos
871. *The growth effects of current account reversals: the role of macroeconomic policies*  
(May 2011) Luiz de Mello, Pier Carlo Padoan and Linda Rousová
870. *Les politiques du logement en France*  
(May 2011) Bénédicte Rolland
869. *How important is wealth for explaining household consumption over the recent crisis? An empirical study for the United States, Japan and the euro area*  
(May 2011) Clovis Kerdrain
868. *Adjusting fiscal balances for asset price cycles*  
(May 2011) Robert Price and Thai-Thanh Dang
867. *Improving the functioning of the housing market in the United Kingdom*  
(May 2011) Christophe André
866. *An analysis of demand for foreign exchange reserves*  
(May 2011) Peter Vujanovic

865. *Episodes of large capital inflows and the likelihood of banking and currency crises and sudden stops*  
(May 2011) Davide Furceri, Stephanie Guichard and Elena Rusticelli
864. *The effect of episodes of large capital inflows on domestic credit*  
(May 2011) Davide Furceri, Stephanie Guichard and Elena Rusticelli
863. *Medium-term determinants of international investment positions: the role of structural policies*  
(May 2011) Davide Furceri, Stephanie Guichard and Elena Rusticelli
862. *French social housing in an international context*  
(May 2011) Kathleen Scanlon and Christine Whitehead
861. *Making the French housing market work better*  
(May 2011) by Hervé Boulhol
860. *Surveillance by international institutions: lessons from the global financial and economic crisis*  
(April 2011) by Kumiharu Shigehara and Paul Atkinson
859. *France's environmental policies: internalising global and local externalities*  
(April 2011) by Balázs Égert
858. *Bringing French public debt down: the options for fiscal consolidation*  
(April 2011) by Balázs Égert
857. *Policy frameworks in the post-crisis environment*  
(April 2011) by Nigel Pain and Oliver Röhn
856. *Global imbalances, exchange rate pegs and capital flows: a closer look*  
(April 2011) by Paul van den Noord
855. *Interest rate pass-through during the global financial crisis: the case of Sweden*  
(April 2011) by Niels-Jakob Harbo Hansen and Peter Welz
854. *What drives inflation in the major OECD Economies*  
(April 2011) by Diego Moccero, Shingo Watanabe and Boris Cournède
853. *Mitigation potential of removing fossil fuel subsidies: A general equilibrium assessment*  
(April 2011) by J.M. Burniaux and J. Chateau
852. *Enhancing labour utilisation in a socially inclusive society in Australia*  
(April 2011) by Vassiliki Koutsogeorgopoulou
851. *Meeting infrastructure needs in Australia*  
(March 2011) by Claude Giorno
850. *Restoring fiscal sustainability in Spain*  
(March 2011) by Pierre Beynet, Andrés Fuentes, Robert Gillingham and Robert Hagemann
849. *Drivers of homeownership rates in selected OECD countries*  
(March 2011) by Dan Andrews and Aida Caldera Sánchez