

Ageing Europe – An Application of National Transfer Accounts for Explaining and Projecting Trends in Public Finances

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Reallocation of Resources Across Age in a Comparative European Setting. The National Transfer Accounts Project

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Abstract

Low fertility and longer lifespans will change the age structure of most industrialized countries. To sustain the welfare state system, the reallocation of resources across age has to be reformed. We therefore need a better understanding of the design of the economic life cycle. The National Transfer Accounts (NTA) offers the method and data to study the economic life cycle. The aim of this paper is to give a brief overview of the NTA methodology, illustrate the shape of the economic life cycle for selected European countries and indicate how the NTA methodology can be applied to define economic support and dependency ratios.

Keywords

NTA methodology, European NTA countries, Dependency Ratios

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This paper can be downloaded without charge from http://www.agenta-project.eu.



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1 Introduction

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Low fertility and longer lifespans will change the age structure of most industrialized countries. Given current retirement regulations, increasing shares of elderly have to be supported by an ageing and shrinking working-age population. The baby boom generation's retirement from the workforce will further intensify this process. However, demography is not destiny and it will depend on how ageing societies will adapt their institutions and economic behaviour to cope with the challenge of changing demographic structures (Fürnkranz-Prskawetz 2012). As argued by Börsch-Supan et al. (2014, p. 229) changes in attitudes towards reforms are important to implement the necessary structural reforms in the pension system and labour market.

To sustain the welfare state system (including the pension, health, and elderly care systems but also investment in education, continued training and innovation), the reallocation of resources across age has to be reformed. We therefore need a better understanding of the design of the economic life cycle, i.e. we need to know how the age pattern of economic activities such as consumption, income and savings differs across countries and time, in order to derive evidence-based options for policy reforms.

The National Transfer Accounts (NTA) Project (Lee and Mason 2011, United Nations 2013) – which has been developed for more than 40 countries all over the world¹ - offers the method and data to study the economic life cycle. A typical characteristic of the life cycle in modern societies are phases of economic dependency at the beginning and end of the life cycle as consumption exceeds labour income in these ages. The difference between consumption and labour income is central to NTA and has been termed the life cycle deficit (LCD) by Lee and Mason (2011). In childhood/adulthood as well as in old age the life cycle deficit is negative, while it is positive during working ages. The LCD can be financed by private and public transfers that are mediated through private or public institutions as well asset based reallocations. While the qualitative shape of the life cycle is

¹ http://www.ntaccounts.org/web/nta/show/



similar across countries, the extent and length of the phases of economic dependency and economic surplus is quite different across countries and over time and will depend on the country specific life cycle together with the prevailing economic, institutional and demographic situation. Since population ageing induces a shift in the age structure of the population, it will require an adjustment of the inter- and intra-generational transfer systems.

Recently we have been awarded and FP7 collaborative research project (AGENTA²) where we will apply the NTA methodology to all European countries to explain and project trends in public finances. The guiding principle of AGENTA is to derive evidence-based options for policy reforms. For this we need to consider the whole system of international transfers (private, public, market and non-market). Our main objective will be (a) to consider the links between the public and private sector in providing resources for children and the elderly population, (b) to consider links between different components of the public budget and (c) to consider the definition of stages of the life cycle (childhood, active and old age) and how these stages affect economic activity.

The aim of the current paper is to give a brief overview of the NTA methodology (section 2), illustrate the shape of the economic life cycle for selected European countries (section 3) and indicate how NTA may be applied to define economic support and dependency ratios (section 4). Section 5 concludes and gives a brief outlook.

² http://www.agenta-project.eu/en/about-agenta.htm



2 NTA methodology

NTAs measure how much income each age group generates through labour and through the ownership of capital, how income is redistributed across age groups through public and private transfers and how each age group uses its disposable resources for consumption. NTA therefore documents the means by which dependent age groups draw on resources from working age population groups.³ These inter-age flows can be a) public transfers (education, health care, unemployment benefits, or pensions), b) private transfers (parents financing consumption of their children), and c) asset based reallocations (e.g. savings, interest on bonds, or proceeds from the sale of a house). Public or private institutions can mediate these flows.

The premise of National Transfer Accounts is to be consistent with the System of National Accounts (SNA). I.e. age-specific profiles of consumption, income and transfers have to be consistent in the aggregate with SNA data. Put differently, NTA brings age into SNA by breaking down the various quantities by age, and thereby introduces information on the relation between the age of individuals and their economic activities into the System of National Accounts framework. The general approach of NTA is to obtain age profiles from surveys and to adjust these profiles by age-specific population numbers to match the aggregate controls from SNA.⁴ The data requirements are quite extensive since the various components of consumption, income, transfers, assets, taxes, etc. have to be estimated by single years of age (see Hammer 2014, chapter 1 and Sambt and Prskawetz 2011 for the case of Austria). Hence, the NTA dataset contains an extensive number of age profiles on the age-specific averages of various economic activities.

³ The NTA methodology is being developed in an international project that currently inlcudes 43 countries. It was initiated by Ronald Lee from Berkeley, University of California, and Andrew Mason from East-West Center, Hawaii. For further information see also www.ntaaccounts.org.

⁴ See Prskawetz and Sambt (2014, p. 969) and Sambt and Prskawetz (2011) for a more in depth explanation of the estimation of consumption, income and resource allocation.



A detailed introduction to the methodology is given in United Nations (2013) and in Lee and Mason (2011). NTA data is currently available for the following European countries: Austria, Finland, France, Germany, Hungary, Italy, Slovenia, Spain, Sweden and the UK.⁵

The underlying principle of the NTA methodology is the flow account identity that has to hold at every age, at the household level, and for the whole economy:

$$YL + YA + T_g^+ + T_f^+ = C + S + T_g^- + T_f^-$$
(1)

The left hand side denotes age specific inflows and the right hand side summarizes age specific outflows. Inflows are composed of labour income $(YL)^6$, asset income (YA) and transfer income from the public sector (T_g^+) and the private sector (T_f^+) . Outflows are composed of consumption (C), net savings S, transfer payments to the government (T_g^-) and transfers to the private sector (T_f^-) .

Transfer inflows and outflows are recorded from the individuals' point of view: inflows constitute the benefits, outflows the contributions to the transfer systems. Public transfer inflows consist for example of benefits such as pensions, health services or child benefits while the public transfer outflows consist mainly of taxes and social contributions. Public transfers can be in-kind (e.g. public education, health care, and defence) or in-cash (e.g. public pensions and child allowances).

Rearranging equation (1) yields the life cycle deficit as the difference between consumption and labour income:

⁵ For detailed description of the NTA results for Finland, Germany, Hungary, Slovenia, Spain and Sweden see Lee and Mason (2011). For the Italian data see Zannella (2013) and for Austria see Hammer (2014).

⁶ Note that labour income reflects labour force participation, unemployment, hours worked and wages (Mason and Lee, 2014, p. 8). Labour income includes the compensation of employees (incl. gross wage as well as the employers´ social contributions) and self-employed labour income. Consumption consists of public and private consumption at basic prices, i.e. without taxes on products such as the VAT.



$$C(a) - YL(a) = YA(a) - S(a) + T_g^+(a) - T_g^-(a) + T_f^+(a) - T_f^-(a)$$
(2)

Life cycle deficit at every age can be financed through asset based reallocation as expressed by the difference between asset income and savings YA(a) - S(a) and by net public and net private transfers as expressed by the difference $(T_g^+(a) - T_g^-(a))$ and $(T_f^+(a) - T_f^-(a))$. All three terms on the right hand side together constitute age reallocation mechanisms.

In the case of asset based reallocations (ABR), people can save and produce, buy and inherit assets during working life and the elderly can finance part of their needs through asset income and dissaving, being this way less dependent on transfers. The ABR is defined as the difference between asset income and savings, therefore it is positive at ages where asset income is greater than savings and negative where savings are greater than asset income.

As Mason and Lee (2007, p. 130) argue "[t]he mechanism by which assets are shifted across age groups is important because it determines whether population ageing leads to accumulation of assets or to the expansion of public and private transfers programs."



3 NTA profiles for European NTA countries

Based on Hammer (2014, p. 41-42) Figure 1 presents per capita consumption and labour profiles for selected European countries together with the age reallocation mechanisms as presented in equation (2).⁷ Note, that these results are based on cross-section age profiles and therefore capture the age and cohort effect simultaneously. The results refer to different years for different countries⁸, as indicated in the legends next to the country names. The solid line presents per capita consumption, the white area labour income, the black area asset based reallocations, the light grey area private transfers and the dark grey area public transfers. To ensure the comparability of the age profiles across countries, we present relative per capita age profiles using the average of labour income in the 30 to 49 age group as the reference category.

The consumption profile is similar across countries with lower values at younger ages, increasing during adult ages due to increasing public expenditures on education, flattening out during adult ages when households are formed and increasing again in old ages when children have left the household. Consumption above age 70 is particularly pronounced in Sweden as a consequence of a comprehensive but expensive system of long-term care (Bengtsson, 2010).

The age profile of labour income is shaped by the country specific entry and exit ages to the labour market together with the labour force participation rates. While Austria and Slovenia are countries that show a pronounced labour income already at early ages, they are also countries with the lowest exit ages. Quite on the contrary, the labour income profile extends to higher ages for countries such as Sweden or Finland.

⁷ See also Hammer (2014, p. 39ff) and Loichinger et al. (2014, p. 12ff).

⁸ France is missing in Figure 1 since we have only data on age specific income and consumption and miss other information to present the reallocation of resources as depicted in Figure 1.



Figure 1 also illustrates how the stages of dependency - in young and old age are financed by public versus private transfers⁹ and partly also via asset based reallocations. In young ages, consumption needs are mainly financed through a combination of public (e.g. education and health care) and private transfers (from parents to their children). For young ages public transfers are more important in countries like e.g. Sweden and Finland, while private transfers cover a major share of the life cycle deficit in young ages in the UK. In older ages, consumption needs are mainly covered through public transfers (pension, health and elderly care system) and to a negligible extent through private transfers and only to a small extent through asset based reallocations. Germany, Spain and the UK are those countries where asset based reallocations plays an important role for old age consumption needs. In most European countries elderly do not use their assets for financing their consumption, average saving in old age is positive. This is visible in the small or negative values of asset based reallocation (ABR). Since ABR are defined as asset income minus savings, these results indicate that average net savings is about as large as average asset income in these age groups.

⁹ Unfortunately we have only estimates of net-transfers by age and gender, i.e. we cannot determine the age group from which transfers are received in a specific age group. However, private net transfers are overall quite small in older ages and most likely if they exist they are mainly to younger generations as evident for Sweden, Spain and Germany. In younger ages private net transfers are most likely from parents to children.



4 Alternative measures of support and dependency

So far we have only depicted per capita age profiles of economic activity and age reallocation mechanisms. The role of demography becomes evident if we move towards aggregate values, i.e. if we apply the demographic structure to the ageprofiles shown in the previous section.

To assess the current and future development of the demographic structure on the reallocation of resources across generations, demographic dependency ratios are calculated. These measures relate the dependent age group (young and elderly) to the working-age population. An alternative measure are support ratios that relate the working age population to the total population. A major drawback of these measures is their assumption of fixed age limits that are applied to define the dependent (commonly up to age 20 and starting again at age 65) and working age population. Variations of age profiles of consumption needs and income across countries and over time are not taken into account.

Based on the NTA data we have developed alternative economic dependency and support ratios (Prskawetz and Sambt 2014, Hammer, Prskawetz and Freund 2014, Loichinger et al. 2014) that allow for flexible age limits based on age-specific economic profiles. NTA data therefore allow to endogenously define stages of the life cycle.

In Prskawetz and Sambt (2014) we have introduced an NTA support ratio. We applied NTA age profiles for labour income and consumption (normalised on the per capita labour income of people aged 30-49, as in Figure 1 above). We thereby obtain the effective labour force L(t) and the effective number of consumers N(t) as follows:

$$L(t) = \sum_{a=0}^{\omega} \gamma(a) N(a, t)$$
$$N(t) = \sum_{a=0}^{\omega} a(a) N(a, t)$$



Where N(a,t) denotes the number of people aged a in year t, $\gamma(a)$ denotes the agespecific, time-invariant vector of productivity that is based on the NTA normalized age profile of labour income, and a(a) denotes an age-specific, time-invariant vector of consumption that is based on the NTA age profile of consumption. ω denotes the maximum length of life.

Based on population projections by Eurostat (EUROPOP2010), our projections of the NTA support ratio which relates L(t) to N(t) are more pessimistic as the standard support ratio that applies fixed age limits of age 20 to 64 for L(t) and ignores the age-specific weights $\gamma(a)$ and a(a). For instance, the standard support ratio for Austria (Figure 2) would decline by about 13% up to 2050 (relative to 2000), while the NTA support ratio indicates a decrease by about 19%. We obtained similar results for other European countries, where the NTA support ratio would decline by almost 25% up to 2050 in case of Germany and Slovenia and by about 15% or less in case of France, Hungary, Sweden and the UK. Finland and Spain are similar to Austria with a decline of the support ratio by about 18%. Taking into account the age profile of consumption and income is therefore important to understand the consequences of demographic change on economic dependency.

Such a simulation that is based on cross-sectional age profiles of course ignores behavioural reactions that may be initiated due to demographic, economic and institutional change. Nevertheless such a shift share analysis may provide insight into the pressure on the welfare state system under current demographic developments and if the status quo of age specific economic characteristics prevails.

In Hammer et al. (2014) we introduce an economic dependency ratio that is based on the concept of the NTA life cycle deficit (LCD), i.e. the difference between consumption and labour income. The life cycle deficit is positive for children and elderly persons as consumption exceeds labour income in these ages. During working ages, the life cycle deficit is negative since labour income exceeds consumption, hence a life cycle surplus is generated. Multiplying age specific values of the life cycle surplus and summing over all ages with a positive value of



LCD we obtain a measure of economic dependency. In a similar way we obtain a measure of economic support by multiplying age specific values of the life cycle deficit and summing over all ages with a negative value of LCD. We can then relate the economic dependency to the total labour income in a country to obtain an economic dependency ratio. Likewise we can relate the life cycle surplus to total labour income to obtain a measure of the support ratio, i.e. the share of labour income that is available for transfers to other age groups. The advantage of these indicators based on the country and age-specific consumption and income profiles is that the age borders of life cycle stages of dependency and support are not fixed. As we have shown for selected European countries in Hammer et al. (2014, Table 1) that on average persons stay dependent up to age 23-26 and become economically dependent again around age 59. These numbers differ markedly from the fixed age limits of age 20 and age 65 commonly applied to define the young and old age dependency ratios.

Table 1 summarizes the aggregate life cycle deficit/surplus as percentage of labour income as given in Hammer et al. (2014, Table 1). Economic dependency in young ages varies from 18% in Germany up to 29% in France while economic dependency in old age is lowest in Spain and Sweden with 23% and highest in Italy with 32%. Slovenia and Sweden are the countries that use the highest share of labour income (39%) for savings or transfer to other age groups. Obviously these results are shaped by country specific age profiles of consumption and labour income and the prevailing age structure. In case of France the high share of young people also implies quite a high aggregate dependency for young people. However, the relation is not always that straightforward as indicated by Sweden. Though it is the country with the highest demographic old age dependency it has one of the lowest economic dependency in old age as evident by its high labour force participation rates in older ages. As these indicators show, demographic dependency ratios would hide much of the economic dependency/support as given by the age profiles of consumption of income as built up in NTA.

In Hammer et al. (2014) we have further analysed the economic dependency/support ratio by gender. In all European countries the labour income of females accounts for less than 50% of the total labour income with large



differences however across countries. These differences are explained by country specific differences in female enrolment rates in higher education, as well as cross-country differences in the age at which female give birth to children and their labour market participation as mothers. In Austria, Germany, Italy and the UK the labour income of women amounts to only about one third of total income while the share of female labour income amounts to 42 percent in Sweden and Hungary, 44 per cent in Finland and 45 per cent in Slovenia.

However by only considering paid work, gender differences in production are biased. Women contribute to a much larger extent to unpaid work as compared to males and we have therefore extended our analysis to unpaid work (Hammer et al. 2014). By measuring the value of the time in unpaid production¹⁰ we have extended the concept of the life cycle deficit/surplus for paid- and unpaid work. Most interestingly our results indicated that for Spain and Slovenia, women contribute more to production than men. In Spain this difference is explained by women's much higher involvement in unpaid work compared to men. On the contrary, in Slovenia women contribute almost the same as men to paid work, but they use also more time than men for unpaid household work. For the other European countries the gender gap remained but decreased markedly compared to only considering paid work. In fact, our results indicated that women are involved in production activities to the same extent as men in most countries. Hence, the gender gap therefore may be explained by the higher share of household work for females and its lower valuation.

Table 2 summarizes the life cycle surplus/deficit for paid and unpaid work as presented in Table 3 in Hammer et al. 2014. Similar to Table 1 all values are relative to labour income in paid work. A comparison with gender specific results that is based only on paid work (Table 2 in Hammer et al. 2014) indicates that the life cycle surplus of women now increases while it stays rather unchanged for men since production activities in unpaid work are quite low for men. However in

¹⁰ We applied the same wage to all household activities and set it equal to the average hourly net income of a worker in the age group 30-49 years within a country (cf. Hammer et al. 2014).



case of France, Italy and Spain the life cycle surplus for men decreases once we also include unpaid work since for these countries men generate a negative life cycle surplus for unpaid work. For the elderly the aggregate life cycle deficit in Table 2 is rather similar to the case where only paid work is considered since most of the resources generated by the elderly through unpaid work are consumed by the elderly themselves. However, a closer look by gender indicates that the life cycle deficit in old age decreases for women while it increases for men when we consider unpaid work in addition to paid work only. This may be explained by the fact that women provide unpaid services to elderly male household members.

5 Discussion

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Changes in the age structure of the population require changes in the design of the average economic life cycle to maintain fiscal sustainability of the current public transfer systems in many European countries. As we have shown in this paper, the methodology of NTA helps to gain insight into the economic life cycle and to obtain a better understanding on the role of the current reallocation of resources on the future sustainability of the welfare system. The advantage of NTA is that it is built on a common methodology that eases comparability across countries and over time. Though most of the European NTA profiles are so far only available for selected time periods in a cross section, the data already provide an important insight into the reallocation of resources across age and its dependence on country specific institutional settings and economic behaviour.

Consequences of population ageing are only partly determined by demographic change and to a large extent by the design of the economic life cycle as shown in section 3 of the paper. Based on the NTA methodology, section 4 has illustrated the design of new measures of economic dependency that take into account agespecific levels of production and consumption instead of relying on fixed age limits to determine periods of economic activity and inactivity.

Further work within the NTA framework includes building up National Time Transfer Accounts (NTTA) that also consider the role of unpaid work, in particular services that are produced by household members and transferred to other members of the household. From our results so far we know that transfers – paid and unpaid, private and public – to children and the elderly are provided by the same age groups. Obviously there are tradeoffs between these transfers that any reform of the welfare state system needs to take into account. NTTA will provide a means to quantify these tradeoffs and help to design evidence based policy reforms.

A further challenge is to enhance the NTA methodology by also including heterogeneity by gender, education, family status and country of birth. First attempts have been conducted to build up NTA by gender for European countries



(e.g. Hammer et al. 2014) and we are currently working on introducing educational heterogeneity into the NTA methodology. Considering heterogeneity of NTA flows by other socio-economic characteristics is very important to study how economic resources are reallocated not only by age but also across socio-economic groups.

In summary, NTA methodology moves beyond the focus on public transfers in reforming the welfare state. It also considers private transfers and unpaid work (in case of NTTA). By extending NTA to other socio-economic characteristics it will also help to design a welfare state that integrates the socio-economic heterogeneity across the life cycle into a policy of optimal redistribution of resources across age.



6 References

- Bengtsson, T., editor (2010). Population ageing a threat to the welfare state? The case of Sweden. Springer.
- Börsch-Supan, A., Härtl, K. and Ludwig, A. (2014) Aging in Europe: Reforms, International Diversification, and Behavioural Reactions, American Economic Review: Papers & Proceedings, 104(5), 224-229.
- Fürnkranz-Prskawetz, A. (2012). An Economic Perspective on Ageing, in: Ageing Societies – Mature People. Gesundes Altern als Chance? Symposium 10.Mai 2011. Anlässlich der Feierlichen Sitzung der Österreichischen Akademie der Wissenschaften, ÖAW: Forschung und Gesellschaft 4, 39-48.
- Hammer, B. (2014). The Economic Life Course: An Examination Using National Transfer Accounts. PhD thesis, Vienna University of Technology.
- Hammer, B. and Prskawetz, A. (2013). The public reallocation of resources across age: a comparison of Austria and Sweden. Empirica, 40(3):541-560.
- Hammer, B., Prskawetz, A., and Freund, I. (2014). Production Activities and Economic Dependency by Age and Gender in Europe: A Cross-Country Comparison. Journal of the Economics of Ageing, forthcoming, <u>http://dx.doi.org/10.1016/j.jeoa.2014.09.007</u>
- Lee, R. and Mason, A., editors (2011). Population Aging and the Generational Economy: A Global Perspective. Edward Elgar Pub.
- Loichinger, E., Hammer, B., Prskawetz, A., Freiberger, M. and Sambt, J. (2014). Economic Dependency Ratios: Present Situation and Future Scenarios, Working Paper 74, WWWforEurope, <u>fileadmin/documents/pdf/Workingpapers/WWWforEurope_WPS_no074_MS</u> <u>13.pdf</u>
- Mason, A. and Lee, R.D. (2007). Transfers, capital and consumption over the demographic transition, in: Clark, R., Ogawa, N. and Mason, A. (eds.)



Population Ageing, Intergenerational Transfers and the Macroeconomy, Edward Elgar, Cheltenham, UK.

- Prskawetz, A. and Sambt, J. (2014). Economic support ratios and the demographic dividend in Europe. Demographic Research, 30(34):963-1010.
- Sambt, J. and Prskawetz, A. (2011). National Transfer Accounts for Austria: low levels of education and the generosity of the social security system, in: R. Lee and A. Mason (eds.) Population Aging and the Generational Economy. A Global Perspective. Edward Elgar, Cheltenham, 256-268.
- United Nations (2013). National Transfer Accounts. Manual. Measuring and Analysing the Generational Economy. New York.



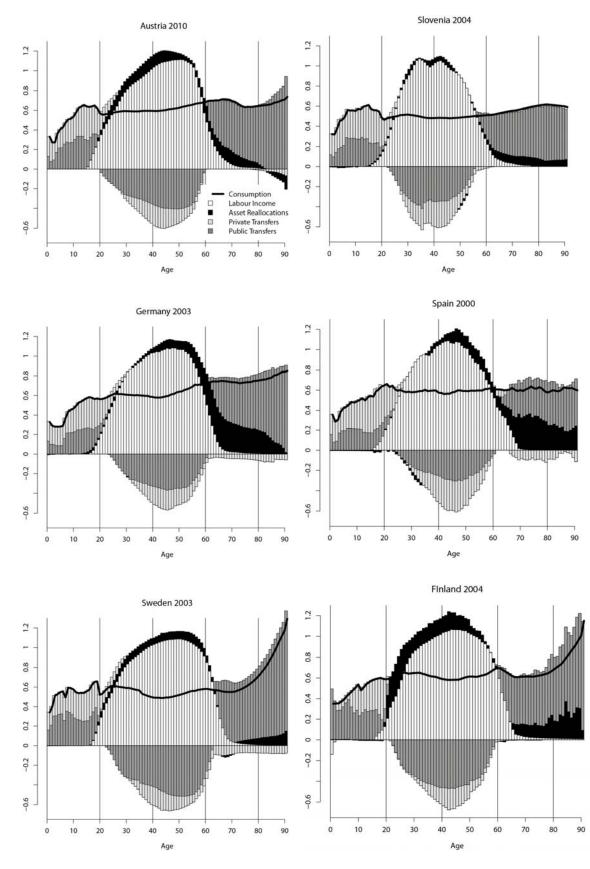


Figure 1: National Transfer Accounts for European countries (Hammer 2014, p.41)



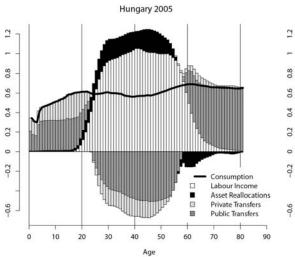
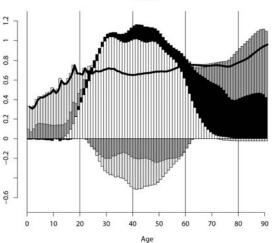
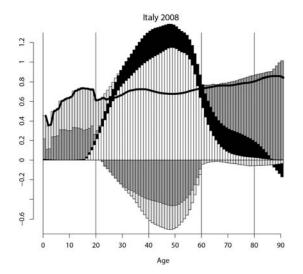


Figure 1: continued (Hammer 2014, p.42)



UK 2007





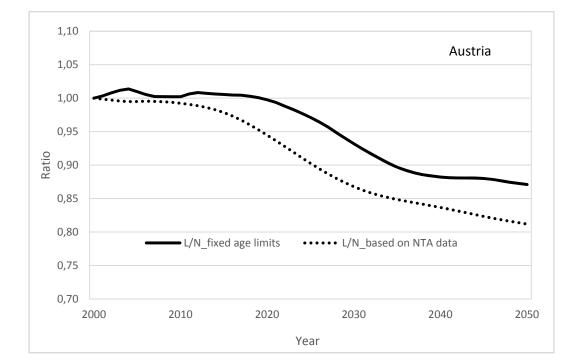


Figure 2: Standard and NTA based support ratio for Austria (relative to 2000) (Prskawetz and Sambt 2014)

Table 1: Life cycle deficit/surplus as percentage of labour income in European Countries

	Aggregate Life Cycle Deficit/Surplus		
	in % of Labour Income		
Country	Young	Working Age	Old
Austria	20	32	25
Finland	26	28	25
France	29	31	24
Germany	18	31	30
Hungary	22	32	27
Italy	26	24	32
Slovenia	24	39	24
Spain	25	27	23
Sweden	25	39	23
UK	27	23	25

Source: Hammer et al. (2014, Table 1, first four columns)



			gate Life Cycle	
		Def	Deficit/Surplus in % of Labour	
		in S		
			Income	
Country	Sex	Working Age	Old	
Austria	Women	15	14	
	Men	31	12	
	Total	45	25	
Finland	Women	21	14	
	Men	22	11	
	Total	42	24	
France	Women	19	12	
	Men	25	12	
	Total	44	23	
Germany	Women	16	17	
	Men	31	11	
	Total	47	28	
Italy	Women	18	13	
	Men	21	13	
	Total	38	26	
Slovenia	Women	30	13	
	Men	23	13	
	Total	53	26	
Spain	Women	27	10	
	Men	19	13	
	Total	46	24	
UK	Women	13	16	
	Men	27	10	
	Total	39	26	

Table 2: Life cycle deficit/surplus as percentage of labour income in European Countries

Source: Hammer et al. (2014, Table 3, first four columns); since there is insufficient information on the age of children in the Multinational Time Use Survey, we cannot present the life cycle deficit for children