Social Inclusion and Income Distribution in the European Union - 2007

Executive Summary of the Monitoring Report prepared by the European Observatory on the Social Situation - Social Inclusion and Income Distribution Network
Social Inclusion and Income Distribution

EXECUTIVE SUMMARY

The third annual report of the network on income distribution and social inclusion of the European Observatory on the Social Situation reviews developments in income inequality and the risk of poverty across the EU on the basis of the data available at the time the analysis was carried out in mid-2007. This largely means, in practice, the data from the new EU Survey of Income and Living Condition (EU-SILC) for 2005, which for the first time enable such a review to be carried out on a reasonably comparable basis. It examines in detail a number of aspects of income inequalities and the factors underlying these, issues which are not only of interest in itself but is important for the formulation of effective policies. These general aspects include:

- the extent of income inequality in the countries of the European Union at the time of the latest enlargement in 2004 (i.e. in the EU25 and not including Romania and Bulgaria);
- the identification of dimensions of poverty and the effect of age, education, employment and other relevant socio-economic factors on the likelihood of someone having income below the poverty line;
- an attempt to estimate the risk of poverty at the EU level, taking a poverty line defined in both absolute terms and relative to median income in the Union as a whole;
- an initial analysis of the risk of income poverty at regional level in those countries where data in the EU-SILC makes it possible;
- an assessment of material deprivation in the countries covered by the most recent EU-SILC, to complement the income poverty analysis;
- the effect of taxes and benefits across the EU on the distribution of income and the relative numbers at risk of poverty;

In addition, a large part of the report is devoted to an in depth analysis of some special aspects of poverty, inequalities and strategies to increase cohesiveness of European societies. These special aspects include:

- An analysis of changes in taxes on income distribution in selected Member States
- An assessment of the distributional effects of childcare subsidies in 5 EU countries

1 The views expressed in this document are those of the authors and do not necessarily represent those of the European Commission.
• An assessment of the intergenerational transmission of disadvantages

Finally, there is a review of recent policy developments affecting the distribution of income and the relative number of people with income below the poverty line in each of the EU Member States together with those in Croatia and Turkey.

As indicated above, the analysis is based on microdata from the new EU-SILC. The dataset for 2005 which provides details of income in the 2004 calendar year became available for analysis in mid- 2007 for all EU-25 Member States, except Malta, which withheld permission for the microdata to be distributed. The EU-SILC represent a prime source of material for analysis of income distribution and social exclusion across the EU as a whole and enables comparisons to be made across counties with a reasonable degree of confidence.

1. INCOME INEQUALITY IN THE EUROPEAN UNION

According to data from the 2005 EU-SILC, Portugal is clearly the country with the highest degree of income inequality in the EU, with a Gini index of 41%. The four Southern European countries, the two Anglo-Saxon countries and the three Baltic States together with Poland have relatively high levels of inequality, with Gini coefficients above 30%. At the other extreme, countries with the lowest degree of income inequality are Sweden, Denmark and Slovenia with Gini indices of below 25%. Between the low and high inequality countries, there are, at the lower end of the ranking, the remaining Nordic Member State, Finland (together with Iceland and Norway) and the Netherlands, and at the upper end Hungary, France and Cyprus with the other 7 Member States (i.e. excluding Malta) in between.

The choice of equivalence scales and the inequality index affects the ranking of countries but only to a relatively small extent. Inequality is generally higher when the OECD I equivalence scale is used (which assigns a weight of 1 to the first adult in a household, 0.7 to all other adults and 0.5 to children) instead of the OECD II scale (which assigns weights of 0.5 to second and subsequent adults and 0.3 to children). Changes in the country ranking using the different equivalence scale are slightly greater when the S80/S20 index is used to measure inequality. The UK moves up to third–fourth place in the ranking among high–inequality countries while Spain moves up three places. In the group of middle–level inequality countries Belgium and Slovakia move down to the lower end of the ranking, while the Netherlands moves up. The ranking of countries also changes to a some extent when different inequality indices are used,

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2 Data for Bulgaria and Romania were collected as part of the 2006 survey and should become available for analysis in the Annual Report for 2008.
the more so when these are relatively sensitive to income changes in the tails of the distribution such as the square of the coefficient of variation or the Atkinson index (with $e=2$).

The countries with the highest risk of poverty rates in the EU are two of the new Member States, Poland, Lithuania and two Mediterranean countries, Spain and Portugal, in all of which just over 20% of the population have income below 60% of the national median. The ranking of countries according to the poverty rate is broadly similar to the inequality ranking as measured by the Gini index, but there are some differences. Spain, Slovakia, Slovenia and the UK rank higher in terms of the risk of poverty than in terms of income inequality, while Estonia, Latvia and France rank higher in terms of income inequality.

The Anglo-Saxon and the Baltic countries show similar factors underlying income inequality, with education and employment having a large effect and age a small one. The Nordic countries form another distinct group, with age, education and employment all having a similar effect on income inequality. Continental, Central European and Mediterranean countries are similar to each other in that education seems to be the most important factor underlying income inequalities, especially in the latter two groups. Employment also has a significant effect in the Continental and Central European countries but less so among Mediterranean countries, reflecting the relatively small proportion of those not in work who live alone.

Comparison of the degree of income inequality or the risk of poverty with the situation in earlier years involves a relatively wide margin of error because of the change in data source – from the ECHP or national sources to the new EU–SILC. The changes observed, therefore, need to be regarded with caution but are more likely to reflect reality in terms of the direction at least the bigger they are. The biggest increases in income inequality between 2000 and 2004 were observed in Portugal, Italy and Ireland. In Portugal, this was associated with an increase in income dispersion within groups, in Italy, with increasing income differences between education groups and in Ireland, with widening differences between age groups and by employment status.

2. WHO ARE THE POOR?

The evidence from the EU–SILC shows that three groups stand out as having a high risk of poverty - defined in terms of having an equivalised income of less than 60% of the national median – in almost all countries: lone parents, families with low work intensity and women aged 65 and over. Not being in employment increases the risk of poverty for all those of working age groups. Contrary to the usual focus on the risk of poverty for the groups concerned, the focus here is on the composition of those with income below the poverty line – i.e. on their broad characteristics and circumstances – and on how this varies between EU Member States, which
gives an indication of the groups on which policy would need to be focused in order to reduce the risk of poverty by most.

Women aged 65 and over, for whom the risk of poverty reaches 50% in some countries tend to account for a higher proportion of the population with income below the poverty line than their population share, and their share can be as high as 12–16%. Lone parents - women in almost all cases - and their children make up 15–20% of all those at risk of poverty in Belgium, the Czech Republic, Germany, Estonia, Ireland, Lithuania, Sweden and the UK.

A large share of those with income below the poverty line are not in employment or live in households where not everyone of working age is actually in work. People of working age who are not in work make up a particularly large share of those with income below the poverty line in Finland (19%), Denmark (16%), Germany and Sweden (12% in each). This is not so much because of their high risk of poverty, but because of their relatively large numbers in these countries.

Couples with one or two children with work intensity below 1 (i.e. typically with either only one partner working or neither) constitute one of the most numerous groups in a number of other countries for the same reason, especially in the Czech Republic (30%) and Luxembourg (27%). Couples with three or more children with work intensity of less than 1 also represent an important part of the total at risk in the three Benelux countries and Ireland.

A significant number of couples with children can equally have income below the poverty line in some countries, even if both partners are working, indicating that low wages are a major risk factor. Couples with 1–2 children with work intensity of 1 make up as much as 12–13% of those at risk of poverty in Hungary, Portugal and Slovakia.

Couples without children also account for a relatively large share of those at risk of poverty in some countries. In Cyprus, couples aged 65 or over make up no less than a quarter of the total in this regard, in this case because of the very high risk of poverty among the elderly population. In a number of other countries, including Greece, Portugal, Spain and the UK, the share of elderly couples is 14–16%. For working age couples, the lack of employment is a major risk factor.

3. The risk of income poverty at EU level

The conventional indicator used to monitor the risk of poverty in the EU is one which focuses on people who have income of less than a certain amount in relation to median income in the Member State in which they live. While this might be relevant in a national context by directing the policy attention on those with the lowest levels of income in each Member State who are most likely to be at risk in the country in question, it is less meaningful as an indicator of those
who are most likely to be at risk across the EU as a whole. This is because it takes no account of the substantial differences in the level of median income between Member States - of the fact that in 2004, median income in Luxembourg, the country with the highest level in the EU, was 6 times higher than in Lithuania, the country with the lowest level, even when income is measured in purchasing power parity terms to allow for differences in price levels.

It is likely, therefore, that a considerable proportion of people in Lithuania - or in Latvia, Estonia, Poland and so on - with income above the poverty line, defined in national terms, are more at risk of poverty and deprivation in an absolute sense than a great many of those with income below the poverty line in Luxembourg, or in Denmark, Austria, the Netherlands and so on. To reflect this, it is possible to measure the risk of poverty across the EU by relating the disposable income of people in different countries, adjusted for differences in price levels (i.e. by measuring in purchasing power parity terms), to median income at EU level. Such a measure provides a means of assessing differences in living standards between people living in the EU as well as of monitoring the process of catching up of the poorer parts of the Union in terms of household income. Accordingly, it represents a complement to measures of GDP per head at present used to monitor disparities in economic performance and in the income generated in different parts of the EU, which, because of transfers as well as the income going to companies and government, can differ markedly from household income.

The analysis shows that just under 23% of people living in the EU had income below 60% of the EU median. This compares with 16% of people across the Union who had income below 60% of the national median in the country in which they lived, the figure which is usually cited as representing the overall risk of poverty rate in the Union. Many of the people with the lowest incomes at EU level live in the new Member States, as expected, but almost half of the people concerned live in EU-15 countries – 11% in Spain and 9% in Italy. Although the proportion of people with income below an EU-level poverty line living in EU-15 countries declines as the line is reduced relative to the median, it remains significant even with the poverty line set at 40% of the median.

Moreover, the analysis also indicates the large number of people who have very low income levels in the EU. Around 23.5 million survive on EUR 10 a day (or more precisely the purchasing power equivalent) and 7 million on EUR 5 a day. Although most of the latter live in the new Member States (9–10% of the population in Latvia and Lithuania and 7% in Poland), almost half live in the EU-15 countries. Many of the people concerned are self-employed reporting zero or negative income (income being measured in their case as net trading profits), but even if these are excluded, it still leaves just over 2 million people with this level of income in EU15 Member States and over 1 million in Spain and Italy taken together.
4. THE RISK OF INCOME POVERTY AT REGIONAL LEVEL

For the first time, the EU-SILC enables the risk of poverty to be assessed at regional level within Member States, at least so far as some countries are concerned (those where the sampling frame was constructed so as to give a sample which is representative of those living in different regions of the country).

The estimates of disposable household income at regional level which can be obtained from the, although far from complete, reveal interesting differences in the risk of poverty between regions within countries. These differences are in many cases in line with differences in GDP per head or in average household income levels, but in a number of cases, they are not, suggesting that the distribution of income is by no means uniform across countries, but is more unequal, at least at the bottom end of the scale, in some regions than others. In particular, in the Brussels region of Belgium, around 30% of the population have income below 60% of the national median, much more than in the Walloon region, which has a lower average level of household and a considerably lower level of GDP per head.

Similarly, in Italy, the proportion of people in Sicily and Sardinia taken together with income below the national poverty line defined in the same way was much less than the national average in 2004, according to the EU-SILC, despite their lower average level of income and GDP per head. The figures in Italy, however, as in other regions, require more detailed investigation in order to check both their reliability and the underlying reasons for the differences, in terms, for example, of differences in household characteristics or the circumstances of the people concerned, such as the extent to which they are in work.

5. MATERIAL DEPRIVATION

The measure conventionally used to indicate the risk of poverty and social exclusion in EU Member States, that of having disposable income below 60% of the national median, is both a relative concept which takes no account of absolute levels of income in different countries and only a partial indicator of purchasing power and the standard of living of the people concerned. There are a number of reasons for this, such as the fact it does not reflect accumulated wealth or the extent of income in kind. Accordingly, there have been calls over the years for it to be supplemented by other measures, in addition to those at present included in the set of indicators at present used to monitor the risk of social exclusion across the EU.

One such measure, widely advocated in recent year, is an indicator of material deprivation, which overcomes some of the shortcomings in monetary measures of poverty by assessing directly whether or not people are deprived in terms of their ability to enjoy a standard of living which is generally considered acceptable in the society in which they live. The EU-SILC provides
a means of doing this by including a number of questions on the ability of households to afford certain items which can be regarded as indicators of living standards and to avoid running up debts.

Analysis of the responses to these questions suggests that the extent of material deprivation and financial hardship across the EU is reflected only to a limited extent in the relative number of people with income below 60% of the national median. This is particularly so in many of the new Member States where a significant proportion of the population live in households which report not being able to afford particular consumer goods, taken for granted by the majority in the EU, or a decent meal at least once every other day. Most of the people concerned have income above the risk of poverty threshold so defined. The same is the case as regards other indicators of financial hardship, in particular, being in arrears on utility bills and not having the resources to meet unexpected costs.

Equally, a significant number of people in many parts of the EU report living in poor housing, especially again in the new Member States, in some cases in accommodation which lacks an indoor bath or shower and/or an indoor flushing toilet for the sole use of the household. In the lowest income countries, in particular, a sizeable proportion of the population both live in poor housing and face financial hardship. Again many of these have income above the poverty line.

Accordingly, there is a strong case for supplementing the income-based measure used at present to identify and monitor the risk of poverty and social exclusion by indicators of material deprivation and financial difficulties as well as by indicators of poor housing conditions. This is all the more so since the income-based measures used at present are defined in terms of income relative to the national median, which leaves out of account the large differences which exist between the national medians concerned.

6. The effect of taxes and benefits on income distribution in the EU

Governments have the major role in influencing income distribution through the system of cash benefits and personal taxes, which tend to narrow the proportional income differences although not always. As many benefits and tax concessions are designed to support individuals in particular circumstances, the interaction of tax and benefit measures with the composition of households is crucial so far as the extent of effective support is concerned. The distribution of support for particular contingencies is also affected by the relative level of original income of the target groups – i.e. their position in the income distribution before such support. The analysis focuses on the support provided for children and people of 65 and over, using EUROMOD simulations to estimate its effects.
Overall, the contribution of tax-benefits systems in reducing income inequality is inversely related to the extent of dispersion of disposable income across EU-15 countries – i.e. the effect is larger in those countries where net income after taxes and benefits is more equally distributed – whereas it is not closely correlated with the inequality of incomes before taxes and benefits. The redistributive effect is, therefore, largest in the Nordic countries together with Belgium and Luxembourg. The four Southern Member States together with Ireland have the most unequal distribution of disposable income and the smallest scale of redistribution.

Despite the fact that more income is taxed away than added by benefits, it is benefits which have a much larger equalising effect on incomes. This is because social benefits and public pensions are a major source of income for households at the bottom end of the scale. Total net payment per person ranges from 33% of disposable income in France to 15% in Ireland. The distribution of average payments varies markedly across income groups in the different countries: it is skewed towards the higher income groups in Austria, France and the Southern countries and the lower ones in the Anglo-Saxon and the Nordic countries; and payments are higher in the middle of the distribution in Belgium and Luxembourg and spread equally in Germany.

Support to children is provided through both child-contingent benefits and other benefits, which, in practice, in the Southern countries and the Netherlands are larger than the former. Generally, there is no relationship at all between the size of child-contingent benefits and that of other benefits. In most countries, though not all, children in lower income households receive more support than those in higher income ones, most especially in Denmark and the UK.

In a number of countries, children are also supported through tax concessions that generally are worth more to the higher income households than the lower income ones. In France and Luxemburg, child-contingent tax concessions offset the falling average value of other benefits as income rises. In Greece and Spain, the absence of generous child benefits is combined with child tax concessions which tend to benefit children in higher income households most.

Net benefit payments directed at the elderly (mostly pensions) are much higher than those for children. In most countries, net payments are larger for higher income households than lower income ones, particularly in Austria, Portugal and France. In the UK, the Netherland and Ireland, where private pensions substitute for public, especially at higher levels of income, benefits are relatively uniform across the income distribution.

Countries in which net benefits have the largest effect on reducing the risk of poverty tend to be those in which the risk after taking account of such benefits is lowest (Sweden, Luxemburg, France and Belgium). Net benefits also have an important effect in reducing the risk of poverty
among children in all countries except Spain, Greece and Portugal, though here many children are in households with original income above the poverty line. Not surprisingly, the risk of poverty among the elderly would be extremely high in all countries without old age contingent benefits.

The reduction in the risk of poverty tends to be more closely related to the overall scale of net benefits than to their allocation across the income distribution. In Sweden and the Netherlands, however, a relatively large reduction in the risk of poverty among the elderly is achieved by distributing benefits more towards those on lower income than elsewhere.

7. THE EFFECTS OF CHANGES IN TAXES ON INCOME DISTRIBUTION IN SELECTED MEMBER STATES

This chapter explores the impact of tax and benefit policies on inequality and relative income poverty using three different approaches. The first approach is to use EUROMOD to simulate the effect of tax–benefit measures in order to decompose changes in inequality and poverty into those due to policy changes in taxes and benefits a part and those due to other factors, principally changes in the economic and social situation (such as in unemployment, the underlying distribution of market income and the participation of women in economic activity). This exercise is undertaken for two countries, France and Ireland, for the second half of the 1990s to illustrate its potential and to demonstrate the importance of distinguishing between policy and other factors. The results indicate that policy changes had some effect in both countries. In France, policy tended to equalise incomes and reduce relative income poverty. In Ireland, it tended to increase, though in practice overall inequality fell because of other factors, including changes in the distribution of original income as a result of the reduction in unemployment. In France, policy changes were the main factor underlying the change in inequality over this period.

The second approach examines more simply the absolute effect of tax–benefit policy changes on inequality and poverty between 1998 and 2003 in 9 EU–15 Member States again using EUROMOD, to simulate the effects. The effect is then compared with the actual changes in income distribution indicated by other sources. The comparison suggests that policy changes had an equalising effect in Greece, the UK Austria and France but increased inequality and/or relative income poverty in Finland, Spain, the Netherlands and Ireland. In Belgium, Germany and Portugal, there was little change over the period.

The third approach is to examine the extent to which similar measures have different effects because of (i) the way they interact with other features of the tax–benefit system and (ii) underlying differences in household composition and/or the distribution of original income.
The relatively similar reductions in income tax which occurred in different countries between 1998 and 2006, again simulated using EUROMOD, seem to have had varying effect on the distribution of income because of different settings, such as in the tax base, or because of the factors noted in (i) and (ii) above. In the Netherlands, Finland, France and Germany, there is evidence of a significant increase in overall inequality due to changes in income tax policy. In Belgium, Greece and Spain, the effect of income tax policy changes on inequality is small and not statistically significant.

8. AN ASSESSMENT OF THE DISTRIBUTIONAL EFFECTS OF CHILD CARE SUBSIDIES IN 5 EU COUNTRIES

Public policies aiming to secure access to affordable child care are key to EU and national strategies to reconcile work and family life, to promote equal opportunities and to combat social exclusion. The policy instruments to achieve access to affordable childcare, especially for those on low incomes, include direct provision of childcare services by central and local government and cash benefits and tax concessions for the purchase of childcare from private providers. Little is known, however, about exactly how subsidies for childcare are distributed, for instance whether low-income families benefit from it as much as families further up the income scale.

One way of assessing the distributional effects of such subsidies is to treat benefits in kind in the same way as benefits in cash, i.e. as income support to families. The question then becomes how they affect income distribution and the risk of poverty. An attempt is made to answer this question for five EU countries: Belgium, Finland, Germany, Greece and Sweden.

The analysis indicates that childcare subsidies have very different distributional effects across countries. Except in Germany, a relatively large share of the public spending involved appears to be captured by high- and middle-income groups. Nevertheless, the contribution of childcare subsidies to the incomes of poorer families is greater than to higher income ones. Moreover, including child care subsidies in a broader definition of income tends to reduce the extent of inequality in all 5 countries, especially when a moderate degree aversion to inequality is assumed.

Allowing the poverty line to shift upwards when childcare subsidies are added to monetary incomes produces mixed results. On the one hand, the income of families using publicly-funded childcare improves both absolutely and relatively. On the other hand, while the incomes of non-recipients (pensioners and others without young dependent children) remain unchanged in absolute terms, they decline relative to the higher median income and poverty line which have risen as a result of including the subsidies concerned in income.
For the population at large, childcare subsidies appear to reduce headcount poverty rates and poverty gaps in Belgium, Germany and Greece but not in Finland and Sweden, where the larger number of families with children who brought above the poverty line is offset by those whose relative income declines to below the line. The effects on the risk of poverty among children are less pronounced, though the risk is increased (again relative to a higher poverty line) for families with children over 6 and those with children of pre-school age not using publicly-funded childcare. Nevertheless, the risk of poverty among children and child poverty gaps are reduced in all five countries, most especially in Belgium, closely followed by Sweden, and least so in Finland.

9. THE INTERGENERATIONAL TRANSMISSION OF DISADVANTAGES

The EU-SILC for 2005 included a special ad hoc module which was aimed at obtaining data on the intergenerational transmission of disadvantages by asking respondents about the educational attainment level and occupation of their parents when they were young (specifically around the age of 12–16). Analysis of the data collected indicates clearly that there are significant constraints on social mobility across the EU, in the sense that those from less privileged backgrounds have typically much less chance of attaining a high level of education or a high level job. These constraints, however, vary markedly in importance across the EIU and are especially pronounced in many of the new Member States.

So far as education attainment levels are concerned, it is evident that the education level attained by both men and women is very much influenced by that attained by their father in all EU Member States. At the same time, the influence of their mother’s education level is no less significant, which partly reflects the relatively close correlation between the education levels of mothers and fathers, making it difficult to disentangle the relative importance of one as opposed to the other.

There are, however, marked differences in the scale of the influence between countries whichever parent is considered. It seem particularly large, in a number of the new Member States – the Czech Republic, Hungary, Poland, Slovenia, Slovakia and Cyprus – and also relatively big in Greece, Italy and Portugal. On the other hand, the influence of the parent’s level of education on the education level of their children appears to be smaller in Finland, Germany and Estonia, in particular, than in other countries.

At the same time, the influence of parents’ education levels on that of their children seems to have diminished over the long-term in most countries, though this is less clear-cut in a number of Member States where the influence seems to be strongest – in the Czech Republic, Hungary and Poland, in particular.
It is equally the case that both men and women have significantly more chance in all countries of obtaining a high level job, as a manager, professional or technician, if their father had the same kind of job than if they were in any other occupation. In most countries, however, the influence on sons is greater than on daughters, especially in the new Member States and the southern EU countries.

The information collected on the financial circumstances of the households in which people lived when they were young, despite the low response rates and differences in the form which the question was asked across countries, confirms the implications of the evidence on the links between education levels and occupations of parents and their children. In nearly all Member States in which the information was obtained, therefore, the chances of having an income below the poverty line tend to be greater for those coming from families which faced financial difficulties than from those which did not.

10. **RECENT POLICY DEVELOPMENTS AFFECTING INCOME DISTRIBUTION**

While fighting poverty and social exclusion is a widely shared goal across the EU, responsibility for doing so lies firmly with Member States. Although the latter have pursued similar paths in many areas, the measures taken in respect of social benefits and taxation to achieve particular objectives and the priority attached to different policy goals vary significantly across countries. This variation reflects differences not only in the scale and nature of problems of poverty and social exclusion but also in underlying political and economic circumstances and the financial resources available, in the design of tax and benefit systems and in social values and attitudes towards redistribution.

It is difficult, therefore, to detect common trends in policy in this broad area across the EU and candidate countries, but some widespread tendencies are evident. In particular, in many countries, there have attempts to increase incentives to work and to restrain public expenditure, while at the same time trying to avoid exposing those on very low incomes to reduced income support (especially with respect to pensioners). Income tax rates have been cut and/or tax allowances increased in many countries, along with efforts to simplify the tax system. Although this may increase low incomes, those on high incomes usually tend to benefit more. Moreover, positive effects at the bottom end of the scale are often tempered by the fact that many of those concerned pay no tax and therefore gain no benefit. A shift towards refundable tax credits would remedy this, but such a shift has been so far occurred only in a few countries, not least because of the costs involved.

In overall terms, there is little sign of any significant improvement in the relative position of those at the bottom end of the income scale or any potential reduction in the risk of poverty rate in the great majority of Member States as a result of the policy changes introduced, though
in most cases the changes seem unlikely to increase the rate much either. The most notable exception is Ireland, where measures have been targeted on the lowest income groups and where their relative position seems to have improved accordingly. On the other hand, the measures introduced over the past year or so in Sweden, where the risk of poverty according to the data for 2004 was lower than anywhere else in the EU, are set to increase the proportion of the population below the poverty line.