Good evening and thank you all for coming to this lecture - I am amazed by the turnout - and thank you, Professor Beringer, for such a nice introduction. I am going to talk tonight, as you can see from the slide, about “Eradicating Poverty in the 21st Century: When will Social Justice be done?”

The work I am going to talk about is not just my own; many colleagues have helped me with a lot of this research, particularly colleagues who are part of the University Research Centre called the Townsend Centre for International Poverty Research, which was named in honour of Professor Peter Townsend after he retired. It is traditional to talk about some new - as well as old - research, so my talk will include details of the first ever scientific estimates of the extent of child poverty in the world. We have previously published estimates of the extent of absolute poverty of children in the developing world\(^1\). For tonight’s lecture, I have extended that work to cover the whole of the planet.

I apologise for using PowerPoint for this lecture. As Edward Tufte, an expert in communications of information, has argued\(^2\) PowerPoint is a well known evil because it tends to constrain you down a number of undesirable pathways in presentation style. I shall try to avoid some of the pitfalls he warns about. The lecture will be divided into five themes: The Rhetoric of Poverty, The Reality Behind the Rhetoric, The Consequences of Poverty, The Causes of Poverty and The Solutions to Poverty.
The Rhetoric of Poverty

Poverty is politically very important. Tony Blair, (the Prime Minister) in 1999 set out a commitment to end child poverty in the UK forever within a generation and he and other Ministers have repeatedly repeated that commitment. They have argued that this is the first time in history that it can be done and it should be done. Government Ministers are not just interested in eradicating poverty in the UK - they are also interested in eradicating poverty internationally. Only a few weeks ago, at the Labour Party Conference, Gordon Brown said:

“In 2000 the whole world came together to make a solemn promise for 2015, the Millennium Development Goals:

- The promise of primary education for every child
- The promise of an end to avoidable infant and maternal deaths and
- The promise of a halving of poverty

The Millennium Development Goals included a whole range of other promises - to help improve water supply, to improve sanitation, to reduce child deaths and maternal deaths - to do a whole range of good things. Gordon Brown continued:

“….at the current rates of progress in Sub-Saharan Africa:

- The promise of primary education for all will be delivered not in 2015 but 2230 (115 years too late)
- The promise for the halving of poverty not by 2015 but by 2150 (135 years too late)
- And the promise for cutting infant deaths not by 2015 but by 2165 (150 years too late)

He went on to say:

- 150 years is too long for people to wait for justice
- 150 years is too long to wait when infants are dying in Africa when there are medicines in the rest of the world to heal them
- 150 years is too long to wait for promises to be redeemed and a bond of trust to be honoured
- 150 years is too long to wait when all the world lacks is the will to act"

This was a very powerful speech and I was very glad he made it because he did this after I had set the title to this lecture. Having the Chancellor of the Exchequer call for international justice is very helpful for my aims tonight. However, Gordon Brown was not the first person to call for this international commitment. In 1949, Harry Truman, in his inaugural Presidential address said:

“more than half of the people in the world are living in conditions approaching misery. Their food is inadequate. They are victims of disease. Their economic life is primitive and stagnant. Their poverty is a handicap and a threat both to them and to more prosperous areas.

For the first time in history, humanity possesses the knowledge and the skill to relieve the suffering of these people"
So, I thought I would look at other inaugural addresses and I typed into Google “Inaugural Address and Poverty” and I found a whole lot more that had talked about poverty. I shall read these out and you should try to guess who said this in their inaugural addresses:

“Man holds in his mortal hands the power to abolish all forms of human poverty”

John F. Kennedy
Inaugural Address
Friday, January 20, 1961

“Every blow we inflict against poverty will be a blow against his dark allies of repression and war”

Ronald Reagan
Second Inaugural Address
Monday, January 21, 1985

“In the quiet of American conscience we know that deep persistent poverty is unworthy of our nation’s promise and whatever our views of it’s cause is we can all agree that children are at risk and not at fault”

George W. Bush
Inaugural Address
January 20, 2001

Well, since George W. Bush thinks that children are not at fault, I am going to concentrate on child poverty in particular in this lecture. So you heard it from the President.

Again, people in the past have proclaimed that:

“within a decade no child will go to bed hungry, […] no family will fear for it’s next day’s bread and […] no human being’s future and well being will be stunted by malnutrition”.

That was Henry Kissinger, at the First World Food Conference, Rome 1974 – “Within a decade no child will go to bed hungry”

There has been a lot of rhetoric around poverty but, unfortunately, the reality is somewhat different and one of the purposes of this lecture is to follow the advice of Spinoza who said:

“do not weep, do not wax indignant. Understand.”

You should leave here tonight with a greater understanding of the reality behind the rhetoric and why some of these noble statements by very powerful men and women have not been carried through.
The Reality Behind the Rhetoric

In the world today, in developed countries like this one, most people who die are in their seventies. Thirty million people over the age of 75 died in the five year period 1990 - 1995. However, in the developing world where the overwhelming majority of the world’s population live, the greatest chance of dying is amongst young babies, children under the age of five. Over the same period (1990 – 1995) 55 million children died in the developing world. Whilst there are virtually no child deaths in the developed world, in the developing world, about 10 -11 million young children die each year.

Age at death by age group, 1990-1995

What did they die of?
It is hard to be certain because most developing countries do not have good registration of births or good child mortality records, so these are estimated from epidemiological models. Many poor children are born, become sick and die without ever being recorded by ‘official’ agencies. These children’s very existence remains known only to their families and local communities. What we do know is that the major killers are things like diarrhoea, pneumonia, malaria and neonatal disorders and complications during pregnancy.
Only the good die young? – what kills children

The green shaded parts of the bars are the proportion of these young children where their being malnourished (not having had enough food or having diarrhoea so that they lost weight) contributed to their deaths.

In virtually all these cases, including those children that were not malnourished, these deaths could have been prevented at very low cost\(^6\). Of the 10 – 11 million deaths, virtually all of them are preventable for the cost of not much more than a packet of peanuts. The World Health Organisation argues that world’s biggest killer and the greatest cause of ill-health and suffering across the globe is listed almost at the end of the International Classification of Disease. It is given code Z59.5 -- extreme poverty\(^9\) and seven out of 10 deaths in developing countries can be attributed to just five causes, or a combination of them:

- **Pneumonia** – which can be treated with low cost antibiotics
- **Diarrhoea** – which can be treated with salts and sugar solutions
- **Measles** – which is preventable by inoculation
- **Malaria** – which is preventable by drugs and bed nets
- **Malnutrition** – which is preventable, by sufficient food, clean water and basic sanitation.

Around the world, three out of four children seen by health services are suffering from at least one of these conditions. So, three out of four children who actually get to see medical services (and many children don’t) are suffering from these *preventable* diseases.
Champagne Glass of Income Distribution

The world is a very unequal place and this diagram shows the income distribution of the world. The population of the world is divided into fifths, with the richest fifth having 83% of the world’s income and the poorest fifth having 1.4% of the world’s income. It’s called the champagne glass of income distribution because it looks like a champagne glass and, unfortunately, this stem is getting thinner and thinner. In the 1960s, the income of the wealthiest fifth was 30 times greater than the poorest fifth. It is now 80 times greater. As the world got wealthier, the rich have got richer and the poor have got poorer or just about stayed the same.

This is also true in the UK. Since 1989, the wealth of the 1000 richest people has been estimated annually by the Sunday Times. There are, unfortunately, no good statistics, apart from those constructed by journalists (although they compile them in a very reputable way) on the wealth of the wealthiest. We don’t have good wealth statistics but this is the best estimate. The second column on the graph, the grey one, shows the wealth of the poorest half of the UK population, the poorest 30 million people. You can see that, by 2001, which is the latest data we have available, the 1000 richest people in the UK had almost the same wealth as the poorest 30 million.

There are great disparities in wealth. It is very hard to describe the levels of wealth and what those kind of billions of pounds mean in a way that is understandable. Let’s try to understand the wealth of Bill Gates. If you had, say, a million dollars left at the end of the year - after all your expenses - and every subsequent year you had another million dollars, it would take you something like 30,000 – 50,000 years to be as wealthy as Bill Gates is now. A whole Ice Age would have happened, glaciers would have swept down from the north, a mile of ice would have formed over Leeds - and retreated again - before you were as wealthy as Bill Gates is now. That gives you some idea.
What is Poverty?
One of the problems of studying poverty is the plethora of language and terms. There are many, often confusing, sets of definitions and people use concepts loosely to mean different things. It can be a very confusing subject to study. This is Feiffer's idea.
Poverty has been measured in the UK in various ways. It has often been done by measuring the numbers of people in low income households, that is, households whose incomes are below half the average income after adjusting their incomes for different household sizes and types\(^\text{12}\). This graph shows the numbers living on low incomes and how this has changed since 1961 until the latest data, which is available for 2003. During the 1960s, about 10% – 11% of people were in low income households. This went up a bit under the Conservative administration and the oil shock in the late 1970s and then declined to about 8% during the mid 1970s. In 1975, when Margaret Thatcher was elected, she followed a very different set of social policies and the number of people living in low income households went from 8% to 25% - it trebled, clearly showing that governments do have an effect on the amount of poverty in a country and social policy does make a difference. It stayed around 25% for most of the 1990s and is beginning to fall slowly since the turn of the Millennium.

What happened during those years of Conservative Government can be shown in this table - which divides the population into 10% groups - decile groups - and it shows real weekly income in 1979 and 1996. Those in the lowest 10%, the poorest 10% of the population, saw their real incomes fall from £81 per week to £71 per week. This is after adjusting for the effects of inflation. The majority of the population got wealthier and wealthier, got more and more income. On average, the income of the population in Britain increased by 43% over that period and, in particular, amongst the richest 10%. Their incomes went up 68%, on average. Basically, Britain became wealthier and wealthier during the 1980s but inequality and poverty also increased\(^\text{13}\).
### Change in real median weekly incomes 1979 to 1996 by decile group at April 1998 prices (after housing costs)

<table>
<thead>
<tr>
<th>Income Decile</th>
<th>1979</th>
<th>1996</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bottom 10%</td>
<td>£</td>
<td>£</td>
<td>%</td>
</tr>
<tr>
<td>81</td>
<td>71</td>
<td>-12</td>
<td></td>
</tr>
<tr>
<td>10-20%</td>
<td>104</td>
<td>106</td>
<td>+2</td>
</tr>
<tr>
<td>20-30%</td>
<td>121</td>
<td>132</td>
<td>+9</td>
</tr>
<tr>
<td>30-40%</td>
<td>139</td>
<td>164</td>
<td>+18</td>
</tr>
<tr>
<td>40-50%</td>
<td>157</td>
<td>200</td>
<td>+27</td>
</tr>
<tr>
<td>50-60%</td>
<td>177</td>
<td>236</td>
<td>+33</td>
</tr>
<tr>
<td>60-70%</td>
<td>199</td>
<td>277</td>
<td>+39</td>
</tr>
<tr>
<td>70-80%</td>
<td>227</td>
<td>327</td>
<td>+44</td>
</tr>
<tr>
<td>80-90%</td>
<td>263</td>
<td>402</td>
<td>+53</td>
</tr>
<tr>
<td>Top 10%</td>
<td>347</td>
<td>582</td>
<td>+68</td>
</tr>
<tr>
<td>Total population (mean)</td>
<td>185</td>
<td>264</td>
<td>+43</td>
</tr>
</tbody>
</table>

By the turn of the Millennium, this led to the UK having the largest number of poor people in the European Union, using the European’s Union’s measure of low income poverty. Using their analysis from 1999, 11.1million people in Britain the UK lived in poor households\(^4\). The UK has a much larger population than Germany but, because, there are such high rates of low income, in absolute terms the problem of poverty is worse in the UK than any other European country. It’s one league table we don’t really want to be at the top of.

### Number and percentage of the population living on incomes below 60% of the median in 15 EU countries, 1999

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of the population below 60% median income</th>
<th>Percentage of the population below 60% median income</th>
</tr>
</thead>
<tbody>
<tr>
<td>United Kingdom</td>
<td>11.1</td>
<td>19</td>
</tr>
<tr>
<td>Italy</td>
<td>10.3</td>
<td>18</td>
</tr>
<tr>
<td>Germany</td>
<td>8.9</td>
<td>11</td>
</tr>
<tr>
<td>France</td>
<td>8.7</td>
<td>15</td>
</tr>
<tr>
<td>Spain</td>
<td>7.4</td>
<td>19</td>
</tr>
<tr>
<td>Greece</td>
<td>2.2</td>
<td>21</td>
</tr>
<tr>
<td>Portugal</td>
<td>2.1</td>
<td>21</td>
</tr>
<tr>
<td>Netherlands</td>
<td>1.7</td>
<td>11</td>
</tr>
<tr>
<td>Belgium</td>
<td>1.3</td>
<td>13</td>
</tr>
<tr>
<td>Austria</td>
<td>0.9</td>
<td>12</td>
</tr>
<tr>
<td>Sweden</td>
<td>0.8</td>
<td>9</td>
</tr>
<tr>
<td>Ireland</td>
<td>0.7</td>
<td>18</td>
</tr>
<tr>
<td>Denmark</td>
<td>0.6</td>
<td>11</td>
</tr>
<tr>
<td>Finland</td>
<td>0.6</td>
<td>11</td>
</tr>
<tr>
<td>Luxembourg</td>
<td>0.1</td>
<td>13</td>
</tr>
<tr>
<td>EU(15)</td>
<td>55.7</td>
<td>15</td>
</tr>
</tbody>
</table>
The European Union defines poverty in a number of ways and often it defines poverty and social exclusion in the same way\textsuperscript{15}. The definition of poverty goes back to 1975 when the Council of Europe defined poverty as:

\begin{quote}
"individuals or families whose resources are so small as to exclude them from a minimum acceptable way of life in the Members State in which they live".
\end{quote}

The concept of “resources” was further defined as:

\begin{quote}
"goods, cash income, plus services from other private resources".
\end{quote}

More recently, the European Commission has defined poverty as:

\begin{quote}
"the poor shall be taken to mean persons, families and groups of persons whose resources (material, cultural and social) are so limited as to exclude them from the minimum acceptable way of life in the Member State in which they live".
\end{quote}

The European Union has a relative definition of poverty. It talks about poverty in terms of minimum acceptable ways of life and where you live. This kind of definition is very similar to the definitions of poverty developed by Peter Townsend in his work in the study of\textit{ Poverty in the UK}\textsuperscript{16} and it is often refereed to as a scientific definition of poverty because it is scientifically testable\textsuperscript{17}.

In scientific terms, you can define a group of people as ‘poor’ or ‘non-poor’. The poor are those who have both a low income and a low standard of living. A low income causes them to have a life which is so impoverished it is not acceptable to the society in which they live. The people who aren't poor are those who have a high standard of living and a high income. Low income causes deprivation, low standard of living. I and my colleagues carried out a major study in 1999\textsuperscript{18} - which was a follow-up of work we had done in 1990\textsuperscript{19} and other people had done in 1983\textsuperscript{20}.

We found that, between 1983 and 1990, the number of households living in poverty increased by almost half. In 1983, 14% of households were living in poverty and, by 1990, 21% of households were living in poverty. Poverty continued to increase during the 1990s and, by 1999, the number of households living in poverty had again increased to over 24%.

You get a very similar agreement between the low income measures of poverty and the scientific low income and deprivation measures such that, by the turn of the Millennium, these relative definitions of poverty gave a figure of about a quarter of households - a quarter of people - were living in poverty in the UK. This rapid increase in poverty occurred during a period when the majority of British households were becoming more and more wealthy. To get an idea of what these kind of growth rates mean, poverty increased on average by 1% of households per year during the 1980s and 0.3% of households per year during the 1990s, which is about the equivalent of all the households in a city the size of Liverpool or Sheffield becoming poor each year during the 1980s and all the inhabitants in the city of the size of Brighton or Milton Keynes becoming poor each year during the 1990s. The Government’s social policy impoverished a city the size of Liverpool every single year during the 1980s, on average, and a city the size of Brighton every single year during the 1990s.
The Consequences of Poverty

So what are the consequences of poverty both in the U.K. and internationally?

In Britain, we found that:\n
- Roughly 9.5 million people in Britain cannot afford adequate housing. That is, they are unable to afford to keep their homes adequately heated, free from damp or in a decent state of decoration. The majority of the population believe that people ought to be able to afford to do this.
- 8 million people cannot afford one or more essential household goods such as refrigerator, telephone, or to repair electrical goods or furniture when they break.
- 7.5 million people cannot afford to participate in common social activities, they cannot afford to visit their friends or families, they cannot afford to attend weddings or funerals or have special celebrations like birthdays or Christmas.
- Over a third of British children go without social or material necessities. These are the things the majority of the population think they ought to be able to have, such as three meals a day, toys, out-of-school activities and adequate clothing. Nearly one fifth of children go without two or more of what the majority think are necessities of life.
- About 6.5 million adults go without essential clothing, such as a warm waterproof coat, because they don’t have the money to buy it.
- 4 million people are not properly fed by today’s standards in Britain.
- Over 10.5 million are financially insecure.

That’s what the low income statistics mean. It’s very hard to know what living below half the average income means and this gives you some idea of the reality of life on a low income.

Absolute and Overall Poverty

When we are looking at poverty across the world, we tend to use internationally agreed definitions, which are applicable more broadly. In 1995, 117 countries at the World Social Summit in Copenhagen adopted two definitions of poverty one called “absolute poverty”, which they proposed to eradicate and the other called “overall poverty”, which they proposed to reduce. Absolute poverty was defined as:

“a condition characterised by severe deprivation of basic human needs, including food, safe drinking water, sanitation facilities, health, shelter, education and information. It depends not only on income but also on access to services.”

This is the type of poverty the world wishes to eradicate. Overall poverty is much closer to the European Union’s definition and talks about citizenship and being able to participate in society in which you live.

As part of a research project for UNICEF, we attempted to use the internationally agreed definition of ‘absolute poverty’ in order to measure the extent of absolute poverty of children in the developing world. Tonight, I am going to talk about the extent of absolute poverty across the whole planet - amongst children. Deprivation can be
thought of as a continuum, which stretches from no deprivation to extreme deprivation at the end of the scale\textsuperscript{24}.

\begin{center}
\textbf{Continuum of deprivation}
\end{center}

Since the definition of absolute poverty is a condition characterized by severe deprivation of basic human need, in order to measure absolute poverty amongst children, it is necessary to define the threshold measures of severe deprivation of basic human need for:

- food
- safe drinking water
- sanitation facilities
- health
- shelter
- education
- information
- access to services

We found that over 1 billion children, half of the children on the planet today, suffer from severe deprivation of basic human need. Thirty percent of the children on the planet, 650 million of them, suffer from absolute poverty, defined as:

\begin{center}
“two or more severe deprivations and basic human need”
\end{center}

‘Severe deprivations of basic need’ are those circumstances that are highly likely to have serious adverse consequences for the health, well-being and development of children. Severe deprivations are causally related to ‘poor’ developmental outcomes both long and short term. This sounds like a very abstract definition but what it means in reality is something like 10 million children a year dying of preventable causes. By the time this lecture is over, over a 1,000 children will have died unnecessarily - largely because of the extreme poverty they are living in.

So what does this mean in real terms for these children’s lives?

Almost a third of the world’s children have to live in dwellings with more than five people per room or which have a mud floor. Charles Booth, a hundred years ago when he was studying poverty in London, looked in the slum conditions of the Victorian East End, His measure of poverty was four or more people per room\textsuperscript{25}. \[\text{Continuum of deprivation}\]
We've used definitions that are worse than the conditions found in the slums of Victorian London and yet, despite that, a third of the world’s children suffer from severe shelter deprivation.

- Over half a billion children have no toilet facilities whatsoever - not even a hole in the ground.
- Over 400 million children are using unsafe open water sources, rivers or ponds or they have to walk 15 minutes or more there and back to water, that’s a thirty minute round trip, that’s so far they cannot carry enough for their needs. Therefore, they cut down on water use and tend to get infections.
- About 1 in 5 children (aged between 3 and 18) lack access to radios, televisions, computers, telephones or newspapers at home. They have no information about the outside world apart from what they can see in their community.
- 15% of the world’s children under the age of 5 are now severely malnourished and almost half of these live in South Asia. These are children whose heights and weights are more than three standard deviations beneath the international reference population norm. Many of the children who were measured, who were this severely malnourished, would have died subsequent to the surveys.
- 275 million children have not been immunised against any disease whatsoever, or they have had a recent illness causing diarrhoea, which is one of the major killers and received no medical advice or treatment. As far as we know, there are about 13% of the children in the world who have never come into contact with medical services.
- 145 million children aged between 7 – 18, that’s about one in nine, are severely educationally deprived - they have never stepped inside a school building.

Percent of the world’s children severely deprived of basic human needs
If you show this on a graph, what you find is the largest severe deprivations of human need amongst children on the planet are for:

- Shelter
- Sanitation
- Water

followed by

- Information
- Food
- Health
- Education

Most of the world’s anti-poverty policies are geared towards improving health and education - they deal with this end. There are very few policies at the moment which deal with the “Physical Capital” problems. There is a real political problem here - politicians are much keener to open schools and hospitals than they are to open public toilet facilities or sewerage treatment plants or water plants and yet we know from the history of Europe - and the reduction in death rates and improvement in living conditions - that getting these basics right - shelter, sanitation and water - are what have the big impact on peoples’ lives. What stops children from dying prematurely are improvements to water, sanitation and housing.

We have measured absolute poverty using definitions of deprivation which are far more severe than are generally used. When the UN measures problems of sanitation or water, they use a definition of improved sanitation and water. We have used children without any toilet facilities whatsoever and those who only have access to rivers or ponds. Our very large estimates of the extent of absolute poverty are highly reliable. They are based on a very large sample of children. We have used a sample of two and a half million children from 83 different countries, figures mainly collected in the late 1990s and early 2000. These very large samples are giving very consistent results on where the major problems lie and which must to be tackled if you want to reduce absolute poverty quickly.

When you map the distribution of the 83 countries for which we had data and which allow us to produce global estimates, what you see are the dark red areas which show countries were over 75% of the children, three-quarters of the children, are living in absolute poverty. The lighter red areas are where 50% (or more) of the children are living in absolute poverty. We can see the swathe through sub Saharan Africa and in India. The lighter colours on the map are where fewer than 25% of the children are absolutely poor. This includes China which has a population of over a billion, a sixth of the world’s population.
The Causes of Poverty

What are the causes of poverty? You will find lots of books and explanations on causes of poverty. One you will often hear talked about in the popular media:

“poverty is due to bad weather, or people having too many babies”

These ‘explanations’ ignore the structural causes of poverty. We know from several hundred years of research that most poverty has a structural cause, rather than being a result of an individual’s bad behaviour or choices. Since the pioneering studies of poverty in the 19th Century, such as Charles Booth’s in London, six groups have been identified as being particularly vulnerable to poverty in developed countries, like the UK.

- The elderly
- The unemployed
- Sick and disabled people
- Low waged workers
- Large families
- Lone parents

In the developing countries, we also have two additional groups at risk of poverty:

- Landless and small farmers
- Fishermen and fisherwoman

In the developed world, we find that the causes of poverty are what you might expect. The next graph shows wages against the child poverty rate for the industrialised countries. Countries where there aren’t many people who have a low wage, such as Sweden, Finland and Belgium have very low child poverty rates. Countries like the USA and the UK, where low waged work is much more prevalent, have very high child poverty rates. It’s fairly straightforward.
Low Wages and Child Poverty

Social Expenditure on People of Working Age and Child Poverty
There are similar results when you look at social expenditure on people of working age - the people of the age who have children and families. You find that, in countries like Denmark, Finland and Sweden, which have high social expenditures on people of working age, high expenditures on families with children, you get very low rates of child poverty. Conversely, Mexico, USA. and Turkey - where there is low social expenditure - you have high rates of child poverty. Social policy does make a difference.

**The Solutions to Poverty**

What are the solutions to poverty? It is traditional in an inaugural address to talk about how you got to this place, at this time. This is a picture of me in my previous career, which Professor Beringer talked about. I am digging a hole in the ground, in the middle of a field in Yorkshire, in order to try and estimate what the wind speed was like during 11,000 years ago at the end of the last glaciation.

*When in a Hole - Stop Digging*

I am digging down to get some buried sand from a fossilised dune. This formed the basis of my first scientific paper27 - a long time ago. As you can tell from the picture – I had more hair. We were in the middle of nowhere on an abandoned airfield and after we had dug down three feet there was suddenly a terrible crunching of bones and dry blood oozed up and we thought “My God - what have we hit?” It turned out to be someone’s cat, which we reburied once we had finished the excavation.
I continued getting deeper into holes. This is me looking for a public water supply in Tonga. It's a limestone area and we you to abseil down a hundred metres into the cave and trace where the water went in order to help manage the water supply and get cleaner water for the Islanders.²⁸

Eventually, I realised that no amount of crawling about in the dark in holes was going to alleviate the problem of poverty for the vast majority of people and that changing policy could do more than individual acts - even well financed ones as part of overseas development aid like this. The problem of poverty really does need a policy solution, not just more individuals looking for better water supplies, although I still believe that is very important in its own right. Therefore, I came and started working in Social Policy, dealing with these problems from the other end.

The Price of Life?
So how much would it cost to end poverty? I've talked to you about the numbers and the squalid conditions - both internationally and in the UK - of the people who are in poverty - billions of children worldwide - 25% of the UK population. How much will it cost to end this poverty? We don't know for certain in the developing world but we have a good estimate. In 1996, the United Nations Development Programme (UNDP) estimated the cost of providing basic social services for all at about $40 billion dollars a year, for ten years.²⁹ Providing basic health and nutrition alone should cost $13 billion dollars. This sounds like a lot money until you compare it with other expenditures
already made on less important items than health services and food for the world’s population. Let’s look at some of these expenditures:

- The US spends $30 billion a year on pizzas
- Europe spends $12 billion a year on dog and cat food

You could virtually eliminate the absolute poverty I have been discussing for everyone on the planet for about what the US spends on pizzas each year and gives you an idea of the trivial amount of money that is required, compared to the wealth of the world.

**The cost of achieving universal access to basic social services**

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<thead>
<tr>
<th>Need</th>
<th>Annual cost (US$ billions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic education for all</td>
<td>6</td>
</tr>
<tr>
<td>Basic health and nutrition</td>
<td>13</td>
</tr>
<tr>
<td>Reproductive health and family planning</td>
<td>12</td>
</tr>
<tr>
<td>Low cost-water supply and sanitation</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total for basic social services</strong></td>
<td><strong>40</strong></td>
</tr>
</tbody>
</table>

**The Cost of Ending Child Poverty**

In terms of eradicating poverty in the developed world, this table is an estimate by UNICEF on how much it would cost to end child poverty - to eradicate it forever. This is what Tony Blair wants to do in the UK. UNICEF estimate that, if you could target funds perfectly, it would cost less than half of a percent of GNP. So, for less than half a percent of GNP, you could raise the incomes of families with children in the UK – the 25% who are beneath the poverty threshold - to above the poverty threshold. You are not talking about vast sums of money.

**The Cost of Ending Child Poverty: the amount needed to raise the incomes of all poor families with children above the poverty threshold**

<table>
<thead>
<tr>
<th>Country</th>
<th>% of GNP</th>
</tr>
</thead>
<tbody>
<tr>
<td>SWEDEN</td>
<td>0.07</td>
</tr>
<tr>
<td>FINLAND</td>
<td>0.08</td>
</tr>
<tr>
<td>BELGIUM</td>
<td>0.09</td>
</tr>
<tr>
<td>LUXEMBOURG</td>
<td>0.09</td>
</tr>
<tr>
<td>NORWAY</td>
<td>0.12</td>
</tr>
<tr>
<td>DENMARK</td>
<td>0.12</td>
</tr>
<tr>
<td>FRANCE</td>
<td>0.14</td>
</tr>
<tr>
<td>HUNGARY</td>
<td>0.24</td>
</tr>
<tr>
<td>GERMANY</td>
<td>0.26</td>
</tr>
<tr>
<td>SPAIN</td>
<td>0.31</td>
</tr>
<tr>
<td>NETHERLANDS</td>
<td>0.31</td>
</tr>
<tr>
<td>AUSTRALIA</td>
<td>0.39</td>
</tr>
<tr>
<td>CANADA</td>
<td>0.46</td>
</tr>
<tr>
<td>UK</td>
<td>0.48</td>
</tr>
<tr>
<td>ITALY</td>
<td>0.50</td>
</tr>
<tr>
<td>POLAND</td>
<td>0.56</td>
</tr>
<tr>
<td>USA</td>
<td>0.66</td>
</tr>
</tbody>
</table>
So what are the solutions have been proposed? Well, the World Bank is the leading authority - the leading international institution - whose job it is to end world poverty. Unfortunately, they are not proposing that the equivalent amount of money the US spends on pizzas should go to the poor but they do have other policies which they have been following for about 40 years. These policies have three main elements:

- Broad based economic growth
- Development of human capital through education
- Minimum social safety nets for the poor

The way they pursue these policies is by adhering to neo-liberal economic orthodoxy which Joseph Stiglitz, who used to be Chief Economist of the World Bank, has described as:

- Privatisation, which tends to rise prices for the poor
- Capital market liberalization which can allow speculators to destabilise countries’ economies, as has happened in Asia and South America a few years ago
- Market based pricing, which is a way of cutting subsidies for basic food stuffs and fuel
- Free trade, which sometimes helps but sometimes doesn’t

**European Solutions to Poverty**

In Europe, the solutions that are being proposed to end poverty are somewhat different. Active labour market intervention, progressive taxation and redistribution through a comprehensive welfare state are seen as much more effective than minimum social safety nets. The European socio-economic security model has been to promote social exclusion and to try to make work pay through secure incomes, better pensions and financial viable health care.

**Growth is Good for the Poor?**

The World Bank took a lot of criticism, particularly in the run up to the year 2000, when it produced its decennial report on poverty. The person who was writing the report (Ravi Kanbur) resigned and the World Bank wouldn’t say why. The Head of the World Bank said “they had no disagreements on the content of the report, but irreconcilable differences on the order of the chapters would be in” but there was considerable pressure on the bank.

Just before the report was released, the Head Economist of the Bank, David Dollar, with one of his colleagues, Aart Kraay, released a paper which purported to prove that growth was good for the poor, that the World Bank’s policies worked and were the most effective ones. They looked at data over 40 years from 118 countries and published their findings in the *Journal of Economic Growth*, a prestigious peer-refereed journal. Their report shows that, as average income increases, so does the income of the poorest 20% of the population. You have virtually a 45º line - it has a slope of 1. So, as average income increases so does the income of the poorest.
Now, in Social Science, if you get a very high correlation and a 45° line, you have either discovered a new law of nature or you have made some sort of statistical error.

Dollar and Kraay's Conclusions: Did they Discover a New Law of Nature?
What did the authors conclude from this high correlation? Well, they concluded that:

- In a large sample of countries spanning the past four decades, average incomes of the poorest fifth of a country on average rise and fall at the same rate as average incomes. This relationship holds across regions and income levels and in normal times as well as during crises.

- This supports the view that a basic policy package of private property, rights fiscal discipline, macroeconomic stability and openness to trade on average increases the income of the poor to the same extent that it increases the income of the other households in society.

- On the other hand, we find little evidence that formal democratic institutions or a large degree of government spending on social services systematically affect incomes of the poor.

Basically, what they argued was that the World Bank's policy on broad-based economic growth was right. As incomes went up, it didn’t matter whether you were rich or poor, if there were good times or bad, crises or not, the incomes of the poor would also go up. Government policies on social spending aimed at the poor had no effect, democracy had no effect, neo-liberal economic growth was the answer.

³⁹
Are Random Numbers Good for the Poor?
Well, I did a little experiment. Instead of using 418 data sets collected at great expense I generated 418 random numbers, two sets of random numbers. As you can see, there is zero correlation between these two sets of random numbers.

Random Average Income Vs Random Income Share of the Poor

I then applied the analysis method used by Dollar & Kraay to show that income is good for the poor. Apparently, random numbers are also good for the poor.

Are Random Numbers Good for the Poor?
(The same set of random numbers analysed using the methodology of Dollar & Kraay)
Head Economists at the World Bank often win the Nobel Prize - they are not stupid. How on earth could they make this kind of mistake? Well, they were under a lot of pressure, as I said, but also they are working in a milieu in economics at the moment which thinks it has found a universal solution. You will find this paper on student reading lists around the world - it’s on the reading lists for our students in the Economics Department here at Bristol.

**Faith in the Market**

People have argued that there is a faith in neo-liberal economics that is almost religious. Edward Luttwak said:

> “at present almost all elite Americans, with corporate chiefs and fashionable economists in the lead, are utterly convinced that they have discovered the winning formula for economic success – the only formula – good for every country, rich or poor, good for all individuals willing and able to heed the message, and of course, good for elite Americans

Privatisation + Deregulation + Globalisation = Turbo – Captialism = Prosperity

George Gilder (Ronald Reagan’s favourite economist and the man he quoted the most in his speeches) wrote a very influential book in 1981, *Wealth and Poverty*. He argued that spending on poor people just made them dependent on benefits and that the problem with poverty was that:

> The world is plagued not so much by poverty but by a rampant “suspicion of wealth…everywhere these ideas prevail…poverty persists and spreads”


He also added later on:

> “It is the entrepreneurs who know the rules of the world and the laws of God”


Here is a recent editorial from the *Economist*, which argues exactly the same message as Gilder made in the 1980s:

> “towards the end of the century, many developing countries – China and India among them – finally threw off this victim’s mantle and began to embrace wicked capitalism, both in the way they organised their domestic economies and in their approach to international trade. All of a sudden, they are a lot less poor, and it hasn’t cost the West a cent”

Apparently, the five year plan of the Central Committee of the Communist Party in China is a capitalist model of neo-liberal economics.

Faith is very good in religion but in Social Science you have to treat it with in the same way as Mark Twain advised, when he said:

> “your faith is what you believe, not what you know”
Can Redistribution Halve Poverty by 2015?
If you look at it more objectively, can economic growth halve poverty in the world by 2015?

This table shows historical growth rates between 1960 – 1990. On average, between 1960 and 1990, in sub-Saharan Africa, growth was 0.2%. In order to halve poverty by 2015, it would have to go up to 5.6% per year, a 28 fold increase …… that’s not going to happen.

Can Economic Growth Halve Poverty by 2015?

<table>
<thead>
<tr>
<th>Developing World</th>
<th>East Asia and Pacific</th>
<th>Eastern Europe and Central Asia</th>
<th>Latin America and Caribbean</th>
<th>Middle East and North Africa</th>
<th>South Asia</th>
<th>Sub-Saharan Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annual growth rate needed to halve world poverty by 2015</td>
<td>3.8%</td>
<td>2.7%</td>
<td>2.4%</td>
<td>3.8%</td>
<td>3.8%</td>
<td>4.7%</td>
</tr>
<tr>
<td>Historical growth 1960–1990</td>
<td>1.7%</td>
<td>3.3%</td>
<td>2.0%</td>
<td>1.3%</td>
<td>4.3%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Total growth needed to halve world poverty by 2015</td>
<td>95%</td>
<td>70%</td>
<td>61%</td>
<td>94%</td>
<td>95%</td>
<td>117%</td>
</tr>
</tbody>
</table>

If we look at the developing world as a whole, historical growth trends have been about 1.7%. In order to eradicate poverty through growth alone, even given the World Bank’s models, which are contestable, it would have to more than double to 3.8%. Again, growth on its own is not going to be the answer.

Can Redistribution Halve Poverty by 2015?

<table>
<thead>
<tr>
<th></th>
<th>Developing World</th>
<th>East Asia and Pacific</th>
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<th>Middle East and North Africa</th>
<th>South Asia</th>
<th>Sub-Saharan Africa</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty decline after a one standard deviation reduction in inequality</td>
<td>67%</td>
<td>31%</td>
<td>42%</td>
<td>45%</td>
<td>34%</td>
<td>17%</td>
<td>62%</td>
</tr>
</tbody>
</table>

By contrast, if you re-distribute some of the income in the world, even within these countries and regions, you find that a one standard deviation redistribution of income, which is the kind of thing a welfare state would do, would lead to a 62% reduction in poverty in sub-Saharan Africa and a 67% reduction in poverty in the developing world. People often argue that there is not much wealth and income in sub-Saharan Africa so there is nothing to redistribute but that’s untrue. A relatively modest amount of
redistribution would more than meet the targets by 2015. Economic growth by itself is unlikely to meet those Millennium development targets - it's almost impossible.

Why is nothing done?
So why has nothing been done? One of the problems is the neo-liberal philosophical position, which equates justice and liberty with freedom from intentional coercion. Intentionality is seen as the key concept for defining “liberty”. Neo-liberals argue that the operation of the market may result in mass death and disease but, since it is not the “intention” of anyone that this should happen – no injustice has occurred. As nobody intended for all these children to die, it’s not unjust that they do, it’s just unfortunate by-product of the operation of the market.  

To take this argument about intentional coercion to extremes would mean that a family starving in rural sub-Saharan Africa has more “freedom” than, say, Bill Gates’ family, as the African family are not being intentionally coerced into paying “taxes”, whereas Bill Gates has to pay some.

Hayek, who was one of the philosophers behind these ideas, went so far as to argue that there are no social obligations beyond your immediate friends and family. He developed this argument to its logical conclusion, that societies had no obligation to meet the social and economic needs of people, as societies did not exist. In his 1979 Heidelberg lecture, he argued that the word ‘social’ had no objective meaning as an adjective or a noun. He stated that nobody knows what the ‘social’ in fact is. Hayek concluded that a social market economy is no market economy, a social constitutional state is no constitutional state, a social conscience is not conscience and that social justice is not justice.

Margaret Thatcher famously spelt out the logic of these neo-liberal arguments in very simple terms when she gave an interview with Women’s Own - that well-known academic periodical:

“I think we’ve been through a period where too many people have been given to understand that if they have a problem, it's the government’s job to cope with it. “I have a problem, I'll get a grant”. “I'm homeless, the government must house me”. They’re casting their problem on society. And, you know, there is no such thing as society. There are individual men and women, and there are families.”

The welfare state is one of the most important mechanisms for alleviating poverty. This graph shows the poverty rate there is - or would be - before the effects of taxes and transfers, before the effects of re-distribution through the welfare state.

You find that countries like Sweden would have a poverty rate 35% if they had no taxes and transfers. However, after the effects of taxes and transfers, the poverty rate in Sweden drops seven-fold to about 5%. The US would have quite a low poverty rate after tax and transfers but, because it doesn’t re-distribute much income between people, they have the highest poverty rate of all. Welfare state mechanisms have been known for a long time to be extremely effective at reducing poverty - they are the most effective mechanisms we know.
Effective and Efficient Anti-Poverty Measures
What would be the most effective and efficient anti-poverty measures\textsuperscript{52}? Firstly:

- **Progressive tax and income policy** - with income redistribution from “rich” to “poor” and also from men to women. Also redistribution of income across an individual’s lifespan. Basically, you tax people during their middle age and you give them their money in childhood and old age - equalise their incomes across their life span and prevent a crisis. That’s what welfare states do.

- **Active labour market interventions** to create high quality jobs. An enforcement of minimum standards on wages and working conditions of the low paid within an international framework. As I showed you before, where you have lots of low waged work, you have high child poverty rates.

- **Universal social insurance and public social services** – the “basic needs services”\textsuperscript{-} by introducing internationally agreed minimum levels of benefit – such as in International Labour Convention No. 102 concerning Minimum Standards of Social Security. It is now a requirement for any country that joins the European Union to have already implemented these kinds of measures - you cannot join without them\textsuperscript{53}.

- **Greater accountability** and increased social and democratic control over trans-national corporations. A lot of the world’s largest economies are actually companies rather than countries and international agencies remedy the “Democratic deficit”. Organisations like the World Bank should be under more democratic control.

*Poverty in the UK: The Solution?*
So what is the solution to poverty in the UK? Since I began this lecture with the words of Gordon Brown, I will leave you with his words from 1983, when he, as a young MP, wrote a book with Robin Cook on poverty in Scotland, entitled, ‘Scotland- the Real
Divide. I shall leave you to read what he thought the solution was then, what advice a future Labour Chancellor should follow in order to eradicate poverty in the UK:

“This would mean restoring to the centre of the tax system two basic principals: the first, that those who cannot afford to pay tax should not have to pay it; and the second, the taxation should rise progressively with income. Programmes that merely redistribute poverty from families to single persons, from the old to the young, from the sick to the healthy, are not a solution. What is needed, is a programme of reform that ends the current situation where the top 10% own 80% of our wealth and 30% of income, even after tax. As Tawney remarked, “What some people call the problem of poverty, others call the problems of riches”.

I think that it is very sound advice.

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4 The inaugural addresses of all Presidents of the USA can be found on The Avalon Project at Yale Law School website http://www.yale.edu/lawweb/avalon/presiden/inaug/inaug.htm


In pursuit of economic growth the World Bank has been the main promoter of Structural Adjustment Programmes in developing countries. These usually consisted of reducing public spending, reducing inflation, opening local markets to global competition and following other ‘neo-liberal’ economic policies. These programmes were often met with antagonism in most of the countries they were supposed to help and resulted in considerable animosity against the Bank. According to Professor Else Øyen (President of the Comparative Research Programme on Poverty) this was “partly due to the harshness of the programme implementation, the failure to obtain the promised results, and the wide spread view that the Bank was on the side of the non-poor, not the poor.”


The World bank published a ‘preliminary’ paper by David Dollar and Aart Kraay called “Growth is Good for the Poor” (http://www.worldbank.org/research/growth/pdf/growthgoodforpoor.pdf). This paper marked ‘preliminary and incomplete’ was widely distributed and given a huge fanfare of publicity. For example; The Financial Times said that the paper "provides what appears to be incontestable evidence" that sustained growth raises the real incomes of the poor and that growth is "helped along by just the policies many of the demonstrators oppose: by macro-economic stability and openness to trade". Even the Guardian joined in. Mark Atkinson wrote on the economic pages that the report illustrated "the harm that would be inflicted on the poor if governments were to listen too hard to the protesters at Seattle and retreat from open markets".


The Guardian reported that “the... remarkable conclusions have been greeted with glee by economic fundamentalists”.


Strangely enough the Guardian (27th May 2004) reported that James Wolfensohn (President of the World Bank), found himself in the unusual position of praising the Communist party's five-year economic plans. "Shanghai is the obvious place to start in considering ways to reduce poverty. There is something here we need to learn about constancy and good management," he said. "This is not a conference for teaching the Washington consensus. The Washington consensus has been dead for years. Today there is no consensus. We are not here to teach doctrines but to exchange ideas."


The relationship between intentionality, moral acts and crime has a long history and is sometimes traced to Thomas Aquinas’s doctrine of double effect: ‘Nothing hinders one act from having two effects, only one of which is intended, while the other is beside the intention. Now moral acts take their species according to what is intended, and not according to what is beside the intention, since this is accidental. Accordingly the act of self-defence may have two effects, one is the saving of one’s life, and the other is the slaying of the
aggressor. Therefore this act, since one’s intention is to save one’s own life, is not unlawful, seeing that it is natural to everything to keep itself in “being,” as far as possible. And yet, though proceeding from a good intention, an act may be rendered unlawful, if it be out of proportion to the end’ (cited in Woodward P.A. (2001) The Doctrine of Double Effect: Philosophers Debate a Controversial Moral Principle. University of Notre Dame Press, Paris.)


50 The term ‘Welfare State’ was ‘invented’ by William Temple, the Archbishop of Canterbury - possibly based on a translation of the German term Wohlfahrtsstaat - and defined as the embodiment of European values by the historian EH Carr in an editorial entitled The New Europe in the The Times newspaper on Monday July 1 1940; “Over the greater part of Western Europe the common values for which we stand are known and prized. We must indeed beware of defining these values in purely nineteenth-century terms. If we speak of democracy, we do not mean a democracy which maintains the right to vote but forgets the right to work and the right to live. If we speak of freedom, we do not mean a rugged individualism which excludes social organisation and economic planning. If we speak of equality, we do not mean a political equality nullified by social and economic privilege”. (for discussion see Briggs, A. (2000). The Welfare State in a Historical Perspective. in The Welfare State Reader, edited by Pierson, C. and Castles, F.G. Oxford: Polity Press)


53 There is agreement by European governments that comprehensive social security provision is both a necessity and a fundamental human right. Article 12 of the revised European Social Charter guarantees the right to social security for “all workers and their dependents”. No country can join the EU that is pursuing a policy of ‘social dumping’, that is without having met at least the social protection requirements in the European Code of Social Security which sets minimum standards for health and welfare benefits and pensions “at a higher level than the minimum standards embodied in International Labour Convention No. 102 concerning Minimum Standards of Social Security”.