Stiglitz presentation in Baku on November 20 2003 at the Initiative for Policy Dialogue/Public Finance Monitor Center workshop "Covering Resource Wealth"

It's a pleasure to be here. What I wanted to do is first to talk for a few minutes about the broad issue of the resource curse and the economics underlying it; and then to talk about how the increased budget transparency and improved budgetary analysis can help address the problems of the resource curse, and how reporters can, by becoming more aware of some of these problems, do a more effective job in reporting.

THE PARADOX OF THE RESOURCE CURSE

The resource curse is basically this simple mystery: economics used to think that being richer—having more resources-- meant that you were better off, and could grow faster; but there is mounting evidence that this may not be so, and that indeed being richer (in resources) makes countries worse off, on average. Around the world, the countries that have had more natural resources have, on average, not grown as well as one would have thought.

Equally problematic, one would think that one of the reasons you need inequality is to provide incentives. When you have a lot of natural resources you don't need a lot of inequality; you can divide the resource pie equally and you don't have any loss of efficiency because incentives are not important. That is why the returns are typically called *rents.* And yet if you look at all the countries with a lot of resources, they are marked by more, not less, inequality – more poverty, not less. So resources do not necessarily lead to growth, and they do not necessarily lead to poverty reduction.

Obviously this is a great question of concern for Azerbaijan, where which has had a long history of resource wealth, and which is about to come into more resource wealth, more oil wealth for the next 20 years. It's a particular problem for Azerbaijan because under current projections there is a limited amount of resource wealth, it's only going to go on for roughly 20 years, and so if the money is not spent well, the future will look particularly bleak. It's also a subject of particular concern for Azerbaijan because the last 10 years, the transition from communism to a market economy has been very hard. GDP has fallen from where it was, and poverty has increased substantially. The oil wealth is viewed as one of the mechanisms of getting out of that set of problems. So it's not just an ordinary situation where more wealth will bring more opportunities; here the oil wealth is perhaps the only way for getting the country out of the difficulties which have confronted it in the past decade.

Explaining the resource curse

There are a number of factors that lead to the resource curse

Rent seeking

The first is rent-seeking. When there is a pile of money, people will strive to get the biggest share of the pie that they can. It's quite different from a country like Switzerland, which has very few natural resources. There, the only way people could become wealthy was to create wealth. When you have natural resources one of the ways to get wealthy— and often seemingly the easiest way-- is to try and take from that existing pie. So energy gets spent trying to divide the existing pie rather than to create a larger pie. In that process wealth gets too often destroyed rather than created. If you look around the world you can see the nature of this conflict which is so often associated with this rent seeking. In Venezuela, wealthy in oil, 2/3rds of the population today remains in poverty and the enormous political conflict that Venezuela faces is a simple one – the two thirds that do not have access to the oil money want to get it from the one third that do have access and the one third that have the money don't want to give it up. That's the root of the conflict, and it's typically covered up by issues of Democracy and voting; these are critical issues,, but behind the turmoil is this issue of the redistribution of the rents from oil.

Corruption, bribery, and cheating

The existence of these amounts of rents often gives rise to corruption. The oil companies (and this is true of other natural resources as well) have a simple objective, maximizing profits, which entails minimizing the amount of money they have to pay to get the oil. A typical way of minimizing the total amount they have to pay is to bribe a government official, to reduce the amount they pay to the country. It's a lot cheaper to pay one person than to pay a country. Unless there are very strong control mechanisms, such bribery is fairly common.

Even when you have good control mechanisms, the oil companies actively try to minimize what they have to pay. In the US for instance, a whole variety of mechanisms have been used over time to try and minimize what they pay to the US or state governments. I cite the example of the US because I think of it as an example of a country with a fairly high and sophisticated institutional development. But even they've had problems., and they take some very subtle forms. One of the things they do is to say, "It's very important o lease the oil to private companies *quickly*", so quickly that there are not enough firms bidding for the different tracts, for the different concessions. With only 1 or 2 firms bidding for every tract, without that competition the price that they have to pay for the leases goes way down. In other words they try to reduce the level of competition in one way or the other. These calls for quick sales were particularly successful under the Reagan Administration.

A second problem that I was involved in has to do with contract enforcement. The contract says that they have to pay a certain amount in royalties based on the 'net-back', what the net receipts are. But the oil companies engage in accounting tricks to reduce the "net-backs". I was involved in a suit on the behalf of the State of Alaska where we detected that the amounts involved in this cheating involved at least a billion dollars, probably more than that. The amount of cheating *per barrel* was small. But with the huge number of barrels, the adds up to a lot of money. And recent reports suggest that some oil companies have done the same thing in the State of Alabama. Because the cheating was so small *per barrel,* it was hard to detect. It took an enormous amount of research to figure out what was going on. In the Alaska case, we had to have a whole research team to find out what the oil companies, Exxon Mobil, BP and all of them were doing. This illustrates the difficulty of the task; and if it is difficult in the United States, how much harder is it likely to be for poor developing countries.

.In some sense, these behaviors (bribery to get a better contract, cheating on contracts once signed) should not come as a surprise. The managers of oil companies see as their obligation to the shareholders to minimize what they pay to the government and maximize what they pay to their shareholders. But, correspondingly, it is the responsibility of governments to be aware of these problems, and to put into place safeguards.

Armed conflict

In many countries, the existence of these huge rents give rise to armed conflict, as different groups and individuals try to fight for it. That obviously is an extreme form of creating an environment that's bad for business.

But even apart from the conflict and the political difficulties to which natural resource wealth gives rise often creates an environment that's not good for business.

The Dutch Disease

One reason is the effect on exchange rates, commonly known as the 'Dutch Disease'. A large amount of oil revenue, coming in leads to the appreciation of the currency and the appreciation of the currency means that it's very hard to export goods (other than the oil or other natural resources) and it's very hard for domestic producers to compete with imports, which means that the import competing sector is weakened. The non-oil sectors suffer as the oil sectors prospers. This is a particular problem in developing countries, especially those facing high unemployment rates, because the oil sector does not generate very many jobs. This is of a particular concern to Azerbaijan because you already are beginning from a framework in which the unemployment rate is very, very high. So anything that would lead to more unemployment would be a disaster. In the case of the Netherlands, where the Dutch disease problem was first noted, they had natural gas. They had a well functioning economy, but the appreciation of the currency was so bad for exports and import competing industries that the effective unemployment rate reached close to 30%. Interestingly, it didn't show up as unemployment, so if you look at the statistics you won't see that. Some 20% of the population went on to disability (ck), perhaps because the government didn't want it to show up as unemployment, but it really was "unemployment": if you've ever visited Netherlands, you would see that the people are actually very hardy people, that the fraction of the population that is disabled and unable to work is no greater than that in other countries, and that there wasn't a new disease that struck them after they discovered natural gas that made them all disabled and unable to work. The fact was that they didn't have jobs; and when you don't have a job your back hurts a lot more than when you do have a job, and they had migraine headaches and all kinds of emotional stress.

Volatility of exchange rates

A high level of oil dependency creates problems for another reason: oil prices are very volatile and that means macro-management is difficult. You have a good year and then you have a bad year. And economies find managing that kind of volatility very difficult, and developing countries find that problem especially difficult because they don't have the mechanisms to absorb those kinds of risks. It becomes a particularly important responsibility of the government to figure out how they can design economic policy to manage that risk.

Weak linkages

The final reason that being rich in oil is not as conducive to successful growth as one might have expected is that the oil industry has weak linkages to the rest of the economy, that is to say, it's not like some industries where, as you develop that industry, there are large spillovers to others, and thus other parts of the economy also grow. Take the automobile industry. When you develop that industry, you quickly get a demand for automobile parts, for seats, for paint and for lots of things that are related to making an automobile. The development of a strong automobile industry can generate the development of linkages to the economy that helps broad based development; you develop a whole variety of skills. The problem with the oil industry is that it is often is very much isolated from the rest of the economy; the country brings in foreign engineers, and foreign equipment, and the industry sits out there in isolation from much of the rest of the economy, creating what has come to be called a dual economy, with relatively weak linkages. The only benefit that the economy itself directly gets is the money that it generates, without linkages, externalities to the rest of the economy.

PRINCIPLES OF A DEVELOPMENT STRATEGY

Now, the fact that the government is going to be getting so much revenue from the oil means that whether the government likes it or not it will get into the business of development planning. There is a period in which economists said, governments' role in development planning should be minimized; let the market take care of everything. But for a country like Azerbaijan or any other oil rich country, that's not an option because the governments sits on large amounts of money and it will have to decide where that money will be spent, how it's going to be spent and how fast it's going to be spent. They will need to think about what is their development strategy.

The Employment Imperative

For Azerbaijan, job creation is a key part of development strategy. No society can function with a high level of unemployment. I would argue that the problem of unemployment is, or should be, central to all governments' policies, although many governments have not taken that responsibility as seriously as they should. (In the US, we passed a law in 1946 called the Full Employment Act, which gives the government the responsibility to maintain full employment.) Because of the Dutch disease problem, designing economic policy for oil rich countries to maintain full employment is a particular challenge.

The Investment Imperative

Another important issue is ensuring that the oil revenues will be used in a way that will be best for the countries long term growth.

One can think of natural resources, oil, as a capital good. It is a capital good. It is a capital good that is below the ground. And what you're doing when you sell oil is taking the wealth of the country and moving it from below the ground to above the ground. Now as you move it from below the ground to above the ground, the question is whether the country is wealthier or poorer as a result. The answer depends on what you do with that money. If you just spend it on consumption, then you are poorer. You had wealth and you no longer have that wealth--that wealth has disappeared. If you take it from below the ground and bring it above the ground and you convert that oil into roads, or capital goods, then you could become wealthier, if those capital goods that you replaced the oil with are highly productive. It is like a portfolio allocation problem: you covert from one form of capital to another form of capital and if in that process you make it into a more productive form of capital, you're wealthier.

Oil wealth is a patrimony that belongs to all generations. The issue is to make sure that oil wealth is converted into a new form of wealth that is more productive. In doing that one has to careful about some of the side-effects. If you do in ways that lead to the appreciation o the currency, and you come down with the Dutch disease, you could actually make the country poorer in the way I described before. You create more unemployment and that destroys some of the basis for wealth creation.

TOOLS FOR IMPROVED PERFORMANCE

There are some tools that economists have developed over time to try to think about these issues which I'm going to describe fairly briefly. One is accounting frameworks, a second is systems of accountability, a third are systems of checks and balances and a fourth is transparency.

Accounting

Economists sometimes joking that the only profession that's more boring than economics is accounting, but actually accounting is very important, because accounting provides information on the basis of which decisions are made. (Information is increasingly being viewed as a sub discipline of the economics of information.) Now unfortunately most of our accounting frameworks are badly flawed, which leads people to make bad decisions. Let me give you an example. The IMF and many other institutions focus on GDP as the measure of output, but no one really should take GDP as a good measure for most purposes, particularly for the objectives with which we are concerned here. Why do I say that? If a company produces output but as it produces output it's machines are run into the ground and it doesn't repair them, the company is going to go out of business. That is why all company accounts require that you look at depreciation. It is the same thing for a country. If output is produced but results in the depletion of natural resources then the country is becoming poorer. GDP figures do not take into account the depletion of natural resources and so don't provide an accurate picture of economic performance for countries where the depletion of natural resources is a major source of income. In this cases, a far better measure would be net national product, not GDP. Similarly, some countries in Latin America borrowed enormously in the beginning of the 90's, effectively for consumption. Their consumption went up, GDP went up and everybody said how wonderful they were doing. But they weren't doing wonderfully. Because GDP was up but they were more and more in debt; they were becoming poorer. All of this became clearer a few years later when their economies crashed. The accounting framework should have warned them; but it didn't. So as reporters it becomes very important to try and ask the questions: Are they using the right accounting framework? what is the right accounting framework. Are the numbers really telling us what is going on?

Every business has what they call a capital account. It looks at the assets and the liabilities. Unfortunately a government doesn't do that. And without that you don't really have a goods picture of what's going on. The assets include the oil in the ground, liabilities include what you borrow. So if you borrow a lot, but you borrow to build a road, then you could become wealthier. If you borrow to pay administrative salaries that are being wasted, then you're becoming poorer. So your capital account is a way of keeping track whether you are becoming wealthier or poorer. This is absolutely essential for a resource rich economy. And unfortunately most of the accounting frameworks don't adequately do that. It can lead to errors in both ways, overspending and under spending.

Accountability

Another important subject is accountability. Government programs are supposed to have certain costs and certain benefits. And the public relies on the government forecasting the costs and benefits of the programs it plans. It's important to go back and see whether government forecasts were in fact accurate. If they were wrong and the planned program did not achieve what it was meant to do then government officials need to be held accountable. For example, it's important to check on whether programs deliver the growth and employment benefits that have been promised. . If a project is described as generating so many jobs and generating so much growth and it doesn't do that, then it's failed and so has the government.

Checks and Balances

A third point is checks and balances. Where there are large amounts of money, there are high incentives to misuse that money. Economists have a very cynical view of human nature; economists say everybody has a price. And in oil rich countries, that price is reached by an awful lot of people. And that's why you need checks and balances.

Even in the US, to give another example, we have two government agencies that check the budgetary process. We have the Office of Management Budget, the central agency within the federal government that checks what all the other agencies are doing. The Department of Treasury keeps its accounts but they report to a central office, the Office of Management Budget that keeps accounts on them. But then you have Congress, with a General Accounting Office and a Congressional Budget Office checking on the OMB. And the fact is that you need to have this independent accounting. It's important to have outside auditors.

I have commended Azerbaijan for the creation of a stabilization fund. I also want to commend you for using outside auditors-- people who have an outside reputation to make sure that the money is not being stolen. It's important to realize that auditors are not checking to see if the money is spent well, they're checking to see if the money is spent the way it's said it's being spent. Being spent well is another issue.

Transparency

Finally there is the issue of transparency, and that's really absolutely critical. Having accounting frameworks so that outsiders-- journalists, NGO's, research centers -- can also see what's going on – Governments in all countries have a proclivity for secrecy. Everybody finds life a lot easier if nobody bothers them. And secrecy means that nobody knows what you're doing and you get bothered a lot less. Secrecy means that if you make a mistake, nobody will detect it. That is why all governments love secrecy. But it should be a basic premise of democratic governments that citizens have the right to know what the government is doing. This principle should be reflected in legislation like the Freedom of information act. For reporters in the U.S. it's been one of the most important tools for finding out what the government is doing. With a very few exceptions, any American has the right to access anything that's going on in the public sector. Those in government still attempt to preserve what secrecy they can. There's an enormous amount of ingenuity that is used to get around whatever rules there are., It becomes very important for journalists and think tanks to figure out how the government is trying to get around the rules to make it less transparent what's going on. Let me just give you two examples, again from the US. The Bush Administration has confused people as to the size of their recent tax cut. It says for instance that it is proposing a $700 billion tax cut over the next 10 years. But if you look at the details the real costs appear to be much larger. For instance, in the fine print of the proposal, the tax cut is in for three years, then out for one year then back in for two years. In other words they phase the tax cut in and out, and the budget people follow the fine print of the proposed legislation, but of course politically, everybody assumes that it's not going to go in and out. To give you one example, in the tax law that was passed, we have very high death-duties, between 40-60% for every year except one year, the year 2010.(It's a very risky policy because all the children will have an incentive to kill their parents in that year in order to avoid the death duties.) Such a tax structure makes absolutely no sense. But why do they propose it? They hope that in fact once they repeal it, it will be permanently repealed. But the budget accountants have to take the law as it is and they say it's only going to cost us this much; they don't ask what will happen if we don't re-institute it

As another example of what governments sometimes do to obfuscate what is going on: governments often give loans that are not repaid—and probably were not intended to be repaid. Such a "loan" is not really a loan; it is really an expenditure. But in the past, the "loan" was not treated as an expenditure at the time it was made; if it ever got recorded in the budget, it would be at the time the loss was recognized. The US changed its budgetary processes to recognize that there is a risk associated with any loan not being repaid, and to take this into account in the budget in the year in which the loan is made. Every loan is assessed for the likelihood of it not being repaid. And in the year the loan is made, if they say the loan is not going to be repaid with a 10% probability, and it's a $1 million loan, on the budget they charge $100,000.

There are various other mechanisms to move expenditures off the budget. The same thing is true for budget categories: you'll find expenditures on one thing or the other will appear all over the place; it's very difficult to know, say, what are the total expenditures on education or health because these will be in various different categories. What you want to have is an accounting framework that tells you how much the government is actually spending and what it is spending its money on, and the government's objective is often to keep these things hidden. It's important to try to work with the government to try to get a transparent budget framework so that you can actually see where the money is going and how it is actually spent.

HOW MUCH SHOULD GOVERNMENT SPEND?

I want to spend the final minutes I have on one of the issues that is of central concern right now in Azerbaijan, which is how much the government should be spending out of the oil fund every year. there have been a number of different proposals. Some people for instance have said, they ought to figure out what the average revenue is going to be and spend that amount every year.. I think that's the wrong way of thinking about the problem.

The way I like to think about it is, to begin with the design of the appropriate development strategy, with particular emphasis on an employment creating development strategies. Given the development strategies, one then asks, how much foreign exchange is required to implement that strategy each year and how much domestic money is needed to implement that strategy? (For reasons given earlier, I'm focusing here mostly on investment.) So, for instance, part of a successful development strategy for Azerbaijan has to focus on the development of the rural sector, providing micro-finance, providing roads, providing increased marketing capacity through marketing associations, providing technical assistance, extension services, providing inputs. Some of it has to focus more broadly on developing the infrastructure of the country. Some of these development strategies require foreign exchange, but some of them do not require a lot of foreign exchange. If you use your stabilization fund or the proceeds from the sale of oil to pay for expenditures that are domestic expenditures, not foreign exchange related, then you're going to have a Dutch Disease problem--an appreciation of the currency that will make domestic job creation more difficult. So how much you spend out of the stabilization fund really depends on what one wants to do at various stages of the development strategy. For instance, I think one of the things that needs to be done early on in the development strategy is improving infrastructure, because one of the problems is getting goods from the rural sector to the markets. But you can't just quickly spend on infrastructure; you have to design a road; you can't just start laying a road down. The design and planning stage may take a year or more. That means that if you don't have the plans already drawn up, for the first year you might not be spending that much. On the other hand you may say that we know that we're going to have a road building program and we will need an enormous amount of cement or asphalt for our road program. We need to buy equipment from abroad to make the asphalt or cement, and we'll import that this year. Those are industries that may help create jobs as we help create infrastructure. So the analysis shouldn't go from how much money we have to what we should spend, but rather, should begin with the question: what do we need to spend to implement our development strategy. I suspect that at least in the early stages of this strategy, it would be difficult to spend all the money that one has available, because it takes time to draw up plans. The real risk is spending money too quickly, particularly too quickly on resources that are basically domestic resources rather than foreign resources, which will give rise to the Dutch disease problem.

There are some people who have suggested that you use the oil revenue to replace domestic tax revenue. I think that is wrong. I think that policy also risks giving rise to a Dutch disease problem. I think you want to think about how you can have progressive taxation, taxation on luxury automobiles, or large houses, high incomes, oligopolies, monopoly profits. I think that it may even be worthwhile borrowing domestically, at the same time that you have money invested abroad. The reason for this should be clear: if you start binging that at money into the country it will lead to an appreciation of the currency. The appreciation of the currency will make domestic growth more difficult, and it will make domestic job creation more difficult. If you didn't worry about the exchange rate or employment, it would be easy. You could just ascertain where to invest the money with the highest rate of return. But once you recognize that there are multiple objectives here, and a particular objective is generating domestic industry by management of the exchange rate, you can't separate out the issue of management of the stabilization fund from the management of the exchange rate. And so as you think about these broader issues, you recognize that you may have to increase domestic taxes or domestic borrowing, so you have the domestic resources to complement the foreign resources that you now have available in abundance.

These are some of the elements of a development strategy, a strategy for spending the oil revenues that you will be having in abundance for the next quarter century, that will generate employment in the near term and which, in 25 years from now, when oil revenues slow down, will leave your country with an economy which is far stronger than it is today.