





#### TAX SYSTEMS NEED TO ADAPT

The foundations of modern tax systems were laid down in the era of the industrial revolution: before globalisation and mass consumption, before the emergence of climate disruption and water supply risks, and before digitisation, automation and robotisation. Considering today's fast-changing world, tax systems will need to adapt.

Just as we now see our planet as an interconnected system, we must take a fresh look at our tax systems as a whole. Specific tax measures, such as a carbon tax, landfill levies or taxes on single-use plastic, may help but they are no longer enough. In order to craft a tax system that is fit for the 21st century, it is necessary to think more widely about what governments should be taxing, and how the tax revenues should be used.

# FOCUS ON LABOUR TAXES AND GREEN TAXES

This discussion paper focuses on two types of tax that are less publicised than corporate income tax but directly related to today's socio-economic challenges: labour taxes (which include personal income tax, payroll taxes and social security contributions) and environmental (or 'green') taxes. Currently, in all OECD countries except Chile, labour taxes provided the largest share of tax revenue: more than VAT and taxes on capital. Across the OECD, labour taxes account for 52.1% of total public revenue raised on average, while green taxes account for only 5.3%.

Between 2009 and 2016, the labour tax burden across the OECD has increased further. On average, of every dollar an employer pays in labour costs, only \$0.64 ends up in the pocket of the employee. There is some variation across continents: African, Latin American and Caribbean countries generally rely more on taxes on goods and services. Still, labour tax revenues provide a significant share of revenues in these regions, and substantially more than green taxes.

Considering the challenges societies are facing today, it is time to rebalance our tax systems.

#### SUPPORT FOR CHANGE

The OECD, IMF, World Bank, European Commission and International Labour Organisation (ILO) have all called for a change from labour taxes towards tax on resource-use and consumption. Business groups such as the WBCSD and the BSDC have also supported such a tax reform. According to the European Commission, a tax shift from labour to green taxes is 'a winning strategy'. In today's world, green taxes are a rational tax base, labour taxes much less so.

#### **REBALANCING THE TAX SYSTEM**

While it is not easy to change tax systems, the basic principle is simple: 'tax less what you want more of'. Three steps need to be taken.

**Step 1:** Put a price on pollution and natural resource use, such as fossil fuels, waste, water and the extraction of metal ores. Countries can start with the low-hanging fruit: options that suit national circumstances best. In light of the Paris Climate Agreement, abolishing fossil fuel subsidies and effective carbon pricing are the first likely candidates.

# Step 2: Use revenues to lower the tax burden on labour and improve social protection

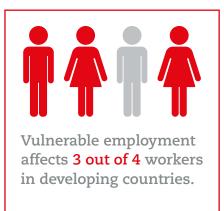
The revenues from Step 1 are used to lower personal income tax, social contributions (both for employees and employers) and payroll taxes. Careful design is required to make sure that the needs of vulnerable groups are addressed through increased social protection or income support.

#### Step 3: Monitor and adjust

Any reform needs to be monitored and adjusted. Tax revenues from green taxes may reduce over time, as they succeed in changing consumer and business behaviour (much like labour tax revenues go down when employment declines). When this happens, the scope of the taxes can be expanded, or the rates increased. In a fast-changing world, tax systems will need to adapt much faster than they have done before.

The risks and opportunities of such a shift are not evenly distributed, but in the face of the megatrends, 'business as usual' is no longer an option. Fortunately, innovation and adaptation are in the DNA of business and every sector has opportunities for developing business models that are fit for the future.





#### **MODELLED IMPACTS**

To contribute to the large body of research on such tax reform, in 2014, a working group of experts convened by The Ex'tax Project developed a scenario decreasing the tax burden on labour (for individuals and employers), and instead increasing VAT rates and excise duties on fossil fuels, as well as taxation of electricity, water and carbon emissions, in the Netherlands. In 2016, Cambridge Econometrics modelled the impacts of such a budget-neutral tax shift scenario across 27 EU member states. The results show that switching €554bn of taxes from labour to pollution and resource use could – compared to business as usual:

- add €842bn in GDP
- enable 6.6m more people to be in employment
- cut carbon emissions by 8.2% by 2020
- save €27.7bn on the energy import bill over a five-year period.

# Why do tax systems need to change today?

#### **UNPRECEDENTED LABOUR CHALLENGES**

Across the world in 2018, 192m people are unemployed. Almost 1.4bn workers are estimated to be in vulnerable employment, meaning they have a lower likelihood of formal work arrangements. Informal workers – those who work without a legal contract – generally have lower wages and little or no job security. When employers hire workers informally or in the 'gig economy', this limits the workers' job security, skill development as well as their social protection.

In developing countries, vulnerable employment affects three out of four workers. According to the ILO, the global youth unemployment rate for 2017 was 13%, and it was highest in the Arab States, at 30%. An estimated 71 million people under 25 years of age are unemployed globally and young people are twice as likely as adults to be in temporary employment.

At the same time, ageing populations are causing one of the most significant social transformations of the 21st century. The number of people aged 60 years or over is expected to more than double by 2050. In OECD countries, public expenditure on health and pensions already account for one-third to one-half of primary expenditure while 12.5% of people aged 65 and over in OECD countries live in relative income poverty. In future, more and more elderly citizens will find they cannot afford not to work.



#### TAXES AFFECT EMPLOYMENT DECISIONS

A lower tax burden on labour creates employment opportunities. The tax burden on labour has an impact on employers' decision-making process when choosing business models and about the hiring and firing of employees. High payroll costs could encourage employers to gain efficiency by minimising the number of employees. Informal employment attracts lower taxes than formal employment (or, when it takes place in the shadow economy, no taxes at all), which tips the scales towards precarious ways of working. Rebalancing the scales is a key challenge to governments around the world.

#### FOSTERING INCLUSIVE GROWTH

Cost considerations can also drive the replacement of human roles with automation and artificial intelligence. The expected effects of new technologies on the labour market are currently the subject of intense debate. The overall agreement among studies, whether predicting a net loss or increase in job opportunities, seems to be that there will be a huge shift in the kind of skills that are demanded. This trend makes it even more important to foster inclusive economies in which labour demand is sufficient to enable people whose tasks or jobs are taken over by machines to find new roles.

#### WEIGHING DOWN INVESTMENTS IN HUMAN CAPITAL

Professional education needs to be revolutionised to provide the skills required in the economy of the future. The growing importance of continuous learning throughout professional life means that universities and learning providers need to recruit people with an appropriate set of expertise to develop new learning models, but extra staff time and resources are also needed from employers – in both the private and public sectors – to enable this continuous learning to take place. In general, a lower tax burden on labour should benefit all sectors that rely heavily on human resources, from innovative businesses undertaking research and development, to hospitals and universities.

Avoiding a high tax burden on labour while boosting social protection will be indispensible to fostering inclusive economies. Over the years, institutions such as the World Bank, the OECD, the IMF, the European Commission, the Eurogroup and the European Council have called for lower labour taxes to reduce unemployment. A key option for financing such a strategy is to increase the tax burden on pollution and resource-use, as these tend to be relatively tax-free, or even subsidised.

#### THE POLLUTER DOESN'T PAY

The costs of environmental megatrends such as climate disruption and pollution are becoming more and more clear. The Lancet Commission estimates global welfare losses from pollution at \$4.6 trillion a year, or 6.2% of global economic output. Such costs are 'externalised', meaning that they are passed on to society, individuals and future generations, rather than absorbed by the polluter. Much research has focused on the external costs of carbon emissions.

#### **GREEN TAX OPTIONS**

There are more than a hundred 'green tax' options available to governments for applying the 'polluter pays' principle, including air pollution (such as carbon and other emissions), energy, food production inputs, fossil fuels, metals and minerals, traffic, waste, and water. 'Green taxes' in this discussion paper refer to all tax measures that put a price on the use of any natural resource.

#### **VARIETY OF MEASURES – VARIETY OF IMPACTS**

Considering the wide variety of green tax bases, the goals and impacts of green taxes also vary considerably. Green taxes can be very effective in changing behaviour and averting environmental damage. The UK Landfill Tax, for example, has been instrumental in reducing the amount of waste dumped in the ground. When Stockholm began taxing vehicles to reduce traffic in the city centre, traffic pollutants dropped and so did the incidence of childhood asthma. Other green taxes are less effective in changing behaviour but still produce long-term revenues. Over the years, for example, the Dutch government raised almost €300bn in revenues for the national coffers from the exploitation of oil and gas fields.

# GREEN TAX USE IS LIMITED AND DECLINING

Green taxes are generally considered growth-friendly, as they distort economy less than taxes on labour and income. In light of the megatrends it is rational to put a price on pollution and resource use, and international institutions are in support of green taxes. Still, their use is limited. As mentioned before, in 2014, green taxes raised 5.3% of total tax revenues in OECD countries (generating revenues equal to 1.6% of GDP in the OECD). Similar modest green tax revenues are found across the globe; 3.8% in China, 4.6% in Japan. South Africa raised 6% of its budget through green taxes, Rwanda 7.4%, and Cameroon 5%. Over the past 15 years, environmental tax as a share of GDP has declined in two thirds of the countries (52 out of 79) in the OECD database.

Rebalancing tax systems is not easy for a number of reasons. First of all, tax policy is driven by politics, and the relatively short cycles in politics make it difficult to develop long-term tax strategies. Secondly, nobody really likes to pay for something that was previously free of charge.

### SUPPORT MEASURES FOR FOSSIL FUELS

Besides levying relatively low tax levels on pollution, almost all nations apply direct and indirect subsidies for environmentally damaging activities. In 2009, leaders of the G20 economies committed to 'phas[ing] out and rationaliz[ing] over the medium term inefficient fossil fuel subsidies'. The OECD has identified more than 1,000 individual government policies that support fossil fuel production and consumption. In 2012 all those fossil fuel support measures were worth \$617bn. By 2015 they had gone down, but still amounted to \$373bn. The majority of these measures are tax expenditures.

#### CARBON PRICES ARE LOW AND INCONSISTENT

At the moment, the vast majority (80%) of all global greenhouse gas emissions and 46% of carbon emissions are free of charge. About half of the emissions covered by carbon pricing mechanisms are priced at less than \$10 per tonne. There is no chemical difference between carbon dioxide emitted from an exhaust pipe, a residential heater or a factory chimney; the impacts and, therefore, the external costs per tonne of carbon are the same. Still, the effective tax rate ranges from €0 per tonne of carbon emitted by coal combustion to more than €90 per tonne of carbon emitted in diesel used in road transport. All these differences in the way fossil fuel uses are taxed and subsidised create artificial distortions. Instead of driving down carbon emissions across the board, they push businesses and individuals towards actions that cost less, but may be more polluting (such as taking an aeroplane rather than a train).

# What's stopping governments from taking decisive action to solve these problems?

# **BARRIERS TO IMPLEMENTATION**

Rebalancing tax systems is not easy for a number of reasons. First of all, tax policy is driven by politics, and the relatively short cycles in politics make it difficult to develop long-term tax strategies. Secondly, nobody really likes to pay for something that was previously free of charge. Also, industries with an interest in keeping the status quo often have a stronger voice than other interest groups such as NGOs, healthcare organisations or small and medium-sized enterprises that may have an interest in a transition. Finally, there is the challenge of how to coordinate tax reform internationally, as shifting financial incentives will change trade patterns.

#### **USE OF REVENUES**

A lower tax burden on labour can generally be achieved by using revenues towards a reduction of personal income tax, payroll taxes and social security contributions. An often-heard worry is that environmental taxes could increase income inequality: they hit low-income households more, as they pay higher proportions of their incomes on energy-intensive goods. It is, however, possible to prevent taxes from increasing income inequality if the revenues are used to benefit the poorest sections of the population. Plenty of policy options are available for alleviating the impacts on specific households: compensating retired pensioners for the increase in heating costs, for example. Benefits can take the form of (means-tested) tax credits, exemptions, allowances or deductions. In some countries, cash transfers might ease the transition for the unemployed and those who live in poverty: the right solution will differ from one country to another. If desirable, green taxes can also be made more progressive by applying block tariffs (higher rates for higher use) or a tax-free threshold (eg leaving a certain amount of water or energy untaxed).

Careful design and implementation can alleviate many, if not all of the concerns about discriminatory effects. Based on the desired outcomes revenues could also be used for increased social protection (including pensions), education and healthcare.

# THE TAX SHIFT IN PRACTICE

Despite the barriers, tax shifts have been implemented in several countries, including the UK (in 1996), Germany (2007), and Colombia (2012). In the 1990s and early 2000s, seven European countries took steps to shift the tax burden from labour to energy and transportation. In 2008, the Canadian province British Columbia began to tax fossil fuel users. All revenues are recycled through tax cuts on both labour and capital. An additional tax credit for low-income households has made the carbon tax progressive.

# TAX REFORM IN LOW- AND MIDDLE-INCOME COUNTRIES

It is widely believed that the governments of many low- and middle-income countries should be aiming to increase the amounts they raise in tax revenue ('domestic resource mobilisation'). According to the World Bank, developing lowand middle-income countries are likely to rely increasingly on tax revenues to finance development objectives: between 50% and 80% of what is required for the SDGs would need to come from domestic resources.



Given the high unemployment rates, increasing taxes on labour in these countries is not necessarily the best option for increasing revenues sustainably. Taxing the use of natural resources might be a way of 'leapfrogging' tax systems to meet the needs of the SDG era and the development of social protection systems.

### PRINCIPLES FOR THE TAX 'EVOLUTION'

For a tax reform to be sustainable, it is essential that the impacts are fairly distributed among income groups. Tax systems need to adapt to changing circumstances and provide stability and consistency; also, the communication about tax reform should be open and transparent. Finally, countries should lead by example while seeking international cooperation to enhance effectiveness.

## **BUSINESSES ARE LEADING THE CHANGE**

Over the years, sustainability has become an increasingly important topic in the boardroom. In fact, business leaders are already leading the change in a number of ways, including the following.

- 1. Advocating climate action and carbon pricing. Since 2014, several major business initiatives in support of carbon pricing have been launched. In 2017, for example, investors with more than \$22 trillion in assets urged G7 and G20 governments to act on climate change, including by applying carbon pricing.
- 2. Applying internal carbon pricing (and sometimes, internal water pricing). In 2017 almost 1,400 companies were factoring an internal 'shadow price' on carbon into their business plans, representing an eight-fold leap over four years. Applying such pricing has been proved to shift investment decisions toward low-carbon options as they become more competitive than polluting options
- 3. Developing new business models. Driven by competitiveness and enabled by technological innovations, new business models are emerging in every sector, from energy to pharmaceuticals and financial services.

#### THE CIRCULAR ECONOMY

Over the last few years, the perspective of the circular economy has gained traction: moving away from today's linear 'take-make-waste' industrial model to a carbon-neutral and regenerative model in which products are 'made to be made again'. In this way, finite resources and materials are not wasted, and businesses can add value over and over again by applying business models such as repair and maintenance services, recycling, remanufacturing and refurbishment. Several governments (including China, Germany and France) as well as the European Union have adopted the circular economy as a policy goal. Businesses – large and small, and in every sector – have started to explore innovative circular business opportunities. IKEA, for example, has started to repair and re-sell its own furniture and has announced its goal of being a fully circular business by 2030.

# TAX SYSTEMS SHOULD ENCOURAGE, NOT HOLD BACK CIRCULAR BUSINESS MODELS

There is a catch, though. Circular business models tend to be more labour and knowledge-intensive than linear models, as they revolve around providing services with products and innovation. When customers return a product this triggers a chain of customer service, handling, sorting, quality monitoring, cleaning, repair and modification. In addition, to develop new materials and production processes, companies need to invest in ambitious research and development efforts. Circular business models require innovation, customisation and a different level of customer service than the 'business-as-usual' selling of massproduced products. When pollution is tax-free or even subsidised, and labour costs are high, businesses face a barrier to scaling up a circular business model. As most studies on the circular economy conclude, reducing labour taxes and increasing green taxes will be key to achieving the circular business ambitions set by governments and businesses.

