FIRST INTERIM REPORT ON

MACRO ANALYSIS – EXECUTIVE SUMMARY

FOR THE MINISTER OF FINANCE

THE DAVIS TAX COMMITTEE

December 2014

Dear Minister

We, as the Members of the Davis Tax Committee, have the honour and privilege to provide you with this report which has been:

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THE TAX SYSTEM AND INCLUSIVE GROWTH IN SOUTH AFRICA:
TOWARDS AN ANALYTICAL FRAMEWORK FOR THE DAVIS TAX COMMITTEE

EXECUTIVE SUMMARY

June 2015

1 INTRODUCTION AND BACKGROUND

This is an executive summary of the full report "*The Tax System and Inclusive Growth in South Africa*"[1] which aims to articulate a set of overarching principles of a good tax system to guide an assessment of the current South African tax system so as to identify the needs/priorities for reforms and to make desirable recommendations for tax reforms. These recommendations focus particularly on the role of the tax system in supporting inclusive growth, employment, development, equity and fiscal sustainability in South Africa and how it might best be structured to achieve these objectives.

The advantages of assessing the extent to which the South African tax system conforms to characteristics of a good tax system are manifold: it will assist in designing strategic tax reforms whose effects on the evolution of the tax structure as *a whole* is relatively known; it will ensure that conflicting objectives are not inadvertently pursued and that the particular objectives of individual tax instruments are not pursued in contradictory ways (Mirrlees et al., 2011).

The Davis Tax Committee (DTC) will be releasing specific detailed reports in a number of areas introduced by this framework. The research gaps identified in this framework will inform the DTC's current and future research programmes.

1.1 The role of the state, broader fiscal policy and the tax system

The role of the tax system cannot be divorced from the broader fiscal and macro-economic policy, or from more general conceptualisation of the role of the state itself within a particular political system. Increases in the size of government and the complexity of its functions have over time had far reaching consequences for the tax system. Far from being merely a mechanical, technical exercise in economic analysis, tax policy is inherently political and ideologically contested, moulded by the dynamic interplay between political values and culture (e.g. the degree of tolerance of inequality or the legitimacy of government) by both economic and political institutions and by socio-economic interest groups. Different views of the role of the state vis-à-vis markets, range from minimalist (mostly associated with free-market or even libertarian views) to interventionist (more associated with social democratic systems and "command" economies), from the "welfare state" to the contemporary South African discourse as an aspirant "democratic developmental state" as articulated in the New Growth Path and the National Development Plan.

Each of these perspectives has radically different implications for the fiscal system broadly and tax systems in particular. It is not surprising, therefore, that attitudes towards the tax system have varied markedly. Some view taxation as a coercive, extractive exercise of predatory state power, essentially to maintain the status quo favouring powerful interest groups. Others regard taxation as an important mechanism for redistribution, social solidarity and justice as well as nation building in a manner which helps to transform not only the economy, but the broader society.

[1] The full report, with the full list of references, is available at http://www.taxcom.org.za/.

One end of the spectrum regards all forms of taxation as market distortions which policy and administration should minimise, while the other end of the spectrum considers tax policy not only as a means to correct market failure (through internalising negative and positive externalities) but also to stimulate and direct growth for particular purposes through incentives and other supply side measures. Tax systems are often under huge pressure to compensate for economic and social policy distortions outside the tax system which are deemed politically intractable, such as in international trade, the labour market and so forth. Paradoxically, the more efficient the tax system is perceived to be, the more these pressures to proliferate the objectives of this system intensify, diluting its focus and often introducing further distortions.

Different political systems and political values in relation to tax equity also influence the relative weight given to the "benefit" principle vis-à-vis the "ability to pay" principle in tax design. The benefit principle bases taxes to finance spending on public goods on the willingness of taxpayers to pay for the benefits received (as revealed through political collective choice mechanisms, such as voting). The ability-to-pay principle regards tax paid as a sacrifice for which there is no direct public service quid pro quo and focuses on what an equitable burden per taxpayer is, relative to their wealth.

In a democratic system, taxation is a critical part of the social contract between the state and its citizens. A broader tax base could foster government accountability to citizens and, if fairly levied and properly administered, create incentives for greater responsiveness to citizens, since Government depends on them for revenue, rather than other sources (e.g. non-tax revenues from oil, gas and mineral wealth sales or foreign aid). Tax legitimacy and perceptions of fairness in the distribution of the tax burden are crucial to the willingness of citizens to pay taxes, but cannot be divorced from broader government legitimacy which is also influenced by other factors, such as honest and clean governance, the efficiency and equity within which Government spending is utilised to deliver services, the degree of corruption and so forth. Despite enforcement measures, most modern tax systems depend to a large extent on voluntary compliance, thus making favourable taxpayer perceptions critical. Equally important in shaping taxpayer perception is their experience at the interface with tax administration, which might range from courteous, professional and timely to arbitrary assessments as well as experiences of bribery and corruption.

For these reasons, not only is the substance of proposed tax reforms crucial in a democracy, but so too is their political management in relation to the business sector and the public which have to bear them as well as the political decision-makers who approve them and the officials who administer them. To this end, participation in and transparency of the tax policy development process, are important.

1.2 Vision for the South African tax system: What does society want the tax system to achieve?

Based on the constitutional, socio-economic, political and policy context facing South Africa, it is important to articulate a set of principles to evaluate the performance of the tax system as it presently operates and to direct any envisaged reforms which

the DTC may contemplate recommending. Tax systems around the world generally pursue a number of objectives:

a) Revenue-raising in order to fund Government expenditure is generally the primary objective of taxation
b) Redistribution of resources to promote social objectives, nation building and social cohesion can be partially effected through the tax system. Pro-poor spending programmes are often a more effective means to achieving this end
c) Market failures can be corrected by applying a tax on production or consumption to internalise negative externalities, e.g. pollution or consumption of harmful products
d) Economic policy objectives can sometimes be met by using taxes and tax incentives in targeted ways to support economic growth
e) The tax system can influence behavioural changes by encouraging certain actions (e.g. savings) and discouraging others (e.g. smoking)
f) International competitiveness is important, although the tax system is not the main driver of international competiveness. Innovation and productivity improvements and the cost of doing business more generally are probably more important. A '"race to the bottom" in efforts to maintain the country's competitive position should be avoided.

It is important to note that these objectives exist for the tax system as a whole; specific tax instruments would typically aim to achieve a specific combination of these policy objectives.

In general, most taxes influence people's behaviour in unhelpful ways and all reduce the welfare of those who bear their economic burden. The challenge for tax design is to achieve social and economic objectives while minimising these welfare-reducing side effects. To understand these particular effects, a framework for thinking about how to judge a tax system and how to think about its effects on welfare, distribution, and efficiency is necessary (Mirrlees et al., 2011) and is the subject of the next section.

2 PRINCIPLES OF A GOOD TAX SYSTEM

The public finance literature characterised a "good" tax system as one that exhibits the following desirable properties (Mirrlees et al., 2011):

a) Economic efficiency

Tax systems cause inefficiency or excess burden as people try to avoid paying tax by working less, consuming less, moving, and the like. In other words, the excess burden or the inefficiency of any tax is determined by the extent to which consumers and producers change their behaviours to avoid a tax.
The negative effects of the tax system on welfare and economic efficiency should be minimised (Mirrlees et al., 2011). The tax system must achieve its objective with minimum distortion in the allocation of resources. In general, the least distortion is attained when a tax is applied to broad bases with low rates. Overall, a tax system must support economic growth.

b) Administrative efficiency

An efficient revenue source minimises administration and compliance costs. Indeed, it takes resources to administer the tax system and it takes individuals time and money to comply with the tax system. All things being equal, a system that costs less to operate is preferable;

c) Equity

There are two concepts of equity to evaluate the fairness of the impact (or incidence) of a tax. The first is the ability-to-pay principle which encompasses both:

- *Horizontal equity*: people with equal capacity should pay the same amount of tax. In other words, there must be a similar treatment for tax purposes of people in similar economic circumstances
- *Vertical equity (progressivity of the tax system)*: people with greater capacity should pay more taxes; i.e. individuals in different economic circumstances must be treated differently.

The second is the benefit principle, in terms of which the tax burden of government expenditures should be apportioned to taxpayers in accordance with the benefits each receives (Black, Calitz & Steenekamp, 2011).
In pursuit of equity objectives, tax and benefit systems can help redistribute resources from high to low income earners.

d) Fairness other than in the distributional sense

This criterion relates to the fairness of procedure, avoidance of discrimination and fairness with respect to legitimate expectations.

e) Transparency and certainty

A tax system that people can understand is preferable to one that is complex and opaque. In general:

- Calculation should be clear and the time and manner of collection known
- Tax reform must follow a transparent consultative process
- It must be easy for citizens to understand and administratively convenient
- It must minimise the amount of resources used in the economy to handle tax affairs
- Important for perceived and actual levels of fairness as those who are less wealthy cannot afford expensive tax advisors.

f) Revenue buoyancy

This refers to Government's ability to raise revenue during all phases of the business cycle, while still supporting a counter-cyclical fiscal policy framework.

An appropriate tax structure would adhere to these general principles. However certain tensions may exist between the various principles of optimal tax design (trade-offs). For example:

- Achieving a simpler policy may be at the expense of efficiency or equity (such as by having cliff edges instead of a tapering system for an incentive)
- Tax incentives may stimulate certain forms of economic activity but may also be less efficient and increase complexity.

How do we then design a tax system that does not unnecessarily discourage economic activity, that achieves distributional objectives and that is fair, transparent, and administratively straightforward? How do we trade off these objectives, in particular the trade-off between efficiency and equity? In answering these questions, the following should be considered:

- In achieving the overall objectives of the tax system, it is important to consider all taxes (and transfer payments) together as a system (systemic and holistic view) and at the same time being clear about the role of each tax within the system.
- It is the redistributive impact of the system as a whole which needs to be measured and judged. Not every tax needs to be progressive (Mirrlees et al., 2011).

2.1 Guidelines in tax design

"Other things being equal, a tax system is likely to be better if it is simple, neutral, and stable". These are guidelines against which to assess a tax system instead of objectives (Mirrlees et al., 2011).

2.1.1 Neutrality

A neutral tax system treats *similar activities in similar ways*. For instance, if system taxes all consumption in the same manner, neutrality over choices that people make about what to consume would be achieved. Taxes are neutral that minimise the distorting effect on the choice of decision-makers and thus minimise the excess burden or deadweight loss. If a tax system is non-neutral, individuals and firms have an incentive to devote socially wasteful effort to reducing their tax payments by changing the form or substance of their activities (Mirrlees et al., 2011; Gruber, 2009).

However, neutrality is not always desirable; for instance in the case where there are negative externalities on the environment, taxes must be higher; and they must be lower in the case of positive externalities created by research and development. In general, a tax system must seek to eliminate non-neutralities which are hard to justify and wasteful, especially those distortions that create complexity, encourage avoidance and add costs for both taxpayers and governments. In general, these can be avoided as they often stem from the lack of clear *underlying economic principles in the design of the tax system* (Mirrlees et al., 2011; Gruber, 2009).

Ordinarily, greater neutrality leads to both greater simplicity and greater fairness. This can be achieved by taking a holistic view of the tax system which recognises the interdependencies between different parts of the tax system, personal and corporate taxes, taxation of dividends and earnings, taxation of debt and equity. In conclusion, increasing the efficiency of the tax system by moving towards greater neutrality is a good principle in guiding reform (Mirrlees et al., 2011).

2.1.2 Simplicity

A good tax system is a simple tax system because it is likely to be relatively transparent and impose low administrative costs. As mentioned above, the neutrality and simplicity are related concepts in that a neutral tax system will tend to be a simple one and vice versa; the less differentiation there is between the taxation of similar activities, the more neutral and the simpler the system will be. The lack of simplicity and neutrality will lead to tax avoidance as individuals and firms strategically reallocate resources in response to changes in taxes so as to reduce their liability. On the other hand, avoidance activity requires a complex set of rules to close loopholes which adds to complexity and to the cost of implementation. Furthermore, it is important to note that setting multiple objectives for the tax system would lead to a substantial degree of complexity.
Overall, any move towards greater complexity in the tax system would have to be strongly justified by irrefutable evidence given that administration and compliance costs matter a great deal and impose significant limitations on tax design (Mirrlees et al., 2011; Black, Calitz & Steenekamp, 2011; Gruber, 2009).

2.1.3 Stability

Constant changes in tax systems impose greater compliance costs on taxpayers. Specifically, they lead to difficulties in making long-term plans, thus negatively impacting on investment decisions by firms and on saving and investment decisions by individuals. However, there are also significant costs associated with keeping a poorly designed system in place for the sake of stability. As such, it is essential to promote certainty by establishing clear and transparent methods of making changes to the tax system and an unambiguous and clearly communicated long-term strategy for change. Therefore, the process of tax reform is just as important as the content of the tax reform itself (Mirrlees et al., 2011).

3 ASSESSING THE SOUTH AFRICAN TAX SYSTEM AGAINST THE GUIDELINES IN TAX DESIGN

This section aims to assess the current South African tax system against the criteria for a good tax system articulated in Section The focus is particularly on the role of the tax system in supporting inclusive growth, employment, development, equity and fiscal sustainability in South Africa and how it might be best structured to achieve these objectives.

The advantages of assessing the extent to which the current South African tax system conforms to the characteristics of a good tax system are manifold: This high level assessment will assist in designing strategic tax reforms whose cumulative effects on the evolution of the tax structure as *a whole* have been considered; it will ensure that conflicting objectives are not pursued at random and that particular objectives are not pursued in contradictory ways (Mirrlees et al., 2011). The assessment focusses first on the major individual tax handles (personal income tax, corporate income tax, value added tax and customs duty) in relation to their efficiency (both economic and administrative), equity, transparency and flexibility/buoyancy. It concludes with observations on the tax system as a whole.

3.1 Assessing each individual tax handle

This section aims to assess the current South African tax system against the criteria articulated in Section 2 above, concluding with general observations.

3.1.1 Personal income tax

3.1.1.1 Efficiency (economic and administrative)

The theoretical literature presents the perspective that a general tax on income, such as a head or a poll tax or a tax on the entire income base (excluding leisure) is efficient (i.e. has no excess burden) since relative prices remain unchanged and therefore behaviours are not modified as a response to tax. Given that leisure can be ignored or taxed, the personal income tax (PIT) becomes a selective tax on labour income which does have an excess burden. Specifically, people may well decide to work more or less as a result of the PIT, thus affecting the supply of labour, with the ultimate effect being determined by the attendant income and substitution effects (Gruber, 2009; Black, Calitz & Steenekamp, 2011). In South Africa, empirical evidence suggests that labour supply appears to be inelastic to tax decisions despite such decisions controlling for other hidden costs, such as transport and grant pay-outs. The results further suggest that it may be possible to raise the lower marginal tax rates and the top rates while reducing those in the middle of the tax schedule (Jooste, 2013).

Additionally, a PIT levied on interest income will be economically inefficient as it changes the relative price of present consumption in terms of future consumption and consequently causes individuals to substitute between present and future consumption. Besides impacting on the supply of labour, the PIT applied selectively on interest income also results in income and substitution effects which together may cause the amount of private savings to increase or decrease. This is particularly important in the context of South Africa where savings as a percentage of household disposable income declined from 4.1% in 1993 to -0.1% in 2008 (Black, Calitz & Steenekamp, 2011). Overall, the international empirical results of the effect of PIT on savings are inconclusive; ranging from a low interest elasticity with respect to savings to other conclusions.

With regard to administrative efficiency, income taxes in general are complex, so that minimising administrative and compliance costs would require relatively sophisticated taxpayers and tax administrators. To achieve administrative efficiency, SARS introduced an electronic filing facility (Black, Calitz & Steenekamp, 2011).

3.1.1.2 Equity, fairness

The PIT system promotes the ability-to pay principle in that the system of exemptions, deductions, rebates and marginal tax rates requires people with equal capacity to pay the same amount of tax and for people with greater capacity to pay more. The incidence of taxation on producers and consumers is ultimately determined by the elasticities of supply and demand. Empirical evidence in South Africa and elsewhere indicates a relatively inelastic supply of labour for men, meaning that they tend to bear the burden of the tax. In the case of married women and high-income professionals who are internationally mobile, the supply of labour is relatively less inelastic, which means that the employer and employee will share the burden of the tax (Gruber, 2009; Black, Calitz & Steenekamp, 2011).

Overall, according to the NDP, the personal income tax is a progressive form of raising revenue as the level of income determines the amount of the tax, so that the poorest are not taxed (NDP 2012: 344).

PIT has a progressive structure (i.e. higher earnings are liable to pay higher tax). Earnings are levied at a minimum marginal rate of 18 percent to a maximum rate of 40 percent, thus helping address some of the economic imbalances in the South African society. The system also contains primary, secondary and tertiary rebates which are used to determine the tax thresholds below which individuals under the age of 65, and between 65 and 75 and above 75 are exempted from tax. Since 2007, the effective tax rate as indicated by PIT collections as the percentage of its tax base, has remained stable between 17.5 and 19.5 percent, thus indicating the effectiveness of tax relief, in particular fiscal drag, in maintaining income equality and keeping progressivity stable.[2]

The PIT can be designed to achieve the desired degree of progressivity while other aspects of the tax system can be focused on achieving efficiency. Overall, the fairness and progressivity of the personal income tax system is dependent on how quickly the income tax brackets increase as taxable income rises, as well as the level of taxable income at which individuals start to pay tax i.e. the tax-free threshold.

3.1.1.3 Transparency and certainty

The manner in which taxes are collected and the calculation of tax liabilities should be certain. Tax rules and procedures should be transparent (National Treasury, 2012).

As mentioned in previous sections, the simplification of the PIT system and the introduction of e-filing has made the system admirably transparent and simple as regards compliance. The threshold for submitting an income tax return has recently been raised again (to R250 000) for employees with a single employer, meaning that the vast majority of workers do not need to file a tax return.

Transparency would also be enhanced if bracket creep, a concealed way of increasing tax revenue whereby taxpayers are pushed into higher income tax brackets as their nominal income increases, is kept in check. SARS has tempered the effects of bracket creep through regular adjustments of the brackets and rebates on an ad hoc basis (Black, Calitz & Steenekamp, 2011).

[2] Presentation by the National Treasury to the macro sub-committee, 29 August 2013.

3.1.1.4 Flexibility/buoyancy

While the tax system should raise sufficient revenue during all phases of the business cycle, it should also lend support to a counter-cyclical fiscal framework (National Treasury 2012). The PIT is an automatic stabiliser due to its built-in flexibility where countercyclical economic behaviour exists. According to SARS, the PIT is the least volatile tax amongst the main tax handles and correlates strongly with compensation of employees. Furthermore, estimated linear elasticities in South Africa imply that a one percent expansion in the economic cycle increases personal income tax by 1.43 percent. However, estimated nonlinear elasticities indicate that, during an expansion, the above elasticities increase by 1.89 percent, whereas during a contraction phase these elasticities increase by 0.89 percent. These results indicate that low tax collections during economic contractions influence the fiscal sustainability and overall fiscal prudence in South Africa. The findings of high tax elasticities during expansions might explain the underestimation of revenue by the Government (Jooste & Naraidoo, 2011).

3.1.2 Corporate income tax

Given that South Africa is a small, open economy, it faces stringent international tax competition and challenges to protect its tax base as a result of base erosion and profit shifting.

3.1.2.1 Efficiency (economic and administrative)

Owing to increased globalisation, to the extent that the CIT regime lowers the after-tax return on investments in a country or a region, the country's competitiveness as an investment destination could be eroded, leading to lower levels of foreign direct investment and innovation as well as growth. Increasingly mobile capital flows and international tax competition have led many countries to limit increases on CIT rates, but preserve their revenue yields by base broadening.
The various dimensions of investment decisions are differentially influenced by average effective rates, marginal effective rates and other dimensions of the tax system. When making the discrete choice of investment location, the average tax rate for a given stream of pre-tax income is critical, since it reflects the share of pre-tax income paid in tax. However, the decision on how much to scale up investment in a given location typically equates the marginal product of capital with its marginal cost. The marginal tax rate influences the marginal cost of capital. International tax competition though, might constrain not only the statutory rate, but also effective and marginal rates. This has implications for the design of a tax policy to optimise efficiency in practice:

> If there were a specific revenue requirement, and an upper limit on the statutory tax rate, for example, the revenue might be achieved only by broadening the tax base — which in turn implies increasing the marginal tax rate and hence distorting investment decisions. This creates a trade-off in competition for capital and competition for profit, although governments can in principle use the two tax instruments of the rate and base to compete for both simultaneously (Mirrlees et al., 2010: 857).

In South Africa, there are a number of estimations of average and marginal effective tax rates by sector, as noted in earlier sections of this document. Much less,

however, is known about corporate behavioural responses in respect to changes in tax policy parameters in the various sectors and sub-sectors.
The collection of CIT is, generally speaking, administratively efficient, especially as e-filing has become more institutionalised. However, there is a priori evidence which suggests that CIT is economically inefficient; it is non-neutral in the sense that it may induce taxpayers to alter their behaviours in ways unrelated to underlying economic fundamentals (the relative costs of production, access to markets, and sound infrastructure) solely as a result of the tax system and also may not minimise the deadweight welfare losses as a result of distorting the underlying allocation of resources in the economy to given revenue adequacy objectives.
Some opportunities to enhance efficiency relate to:

1. *A bias towards debt-financing over equity*: Debt and equity are treated asymmetrically by the tax system: dividends paid from equity capital are not allowed as deductible expenses whilst interest payments are. This asymmetrical tax treatment, which favours debt financing, introduces a distortion into the capital structure of the firm and may encourage retained earnings rather than disbursement of dividends. These issues will be dealt with largely within the BEPS subcommittee of the Davis Tax Committee.
2. *Possible misalignment between industrial tax policy and tax policy:* The sectors which Government has prioritised for industrial policy support (e.g. vehicles, metal products and clothing) actually have the highest ETRs. Furthermore, given Government's emphasis on inclusive growth, it is important to ascertain whether accelerated capital depreciation allowances and other incentives do not create a bias towards capital intensive, rather than labour intensive production methods.
3. *Base erosion and profit shifting:* Due to increased globalisation, if South Africa has a corporate income tax rate higher than other similar countries, then the tax base could be undermined by tax practices such as "thin capitalisation" (where multinational enterprises finance as much of their South African activities as possible through debt rather than equity) or through transfer pricing (where South African entities pay prices which are as high as possible and charge prices that as low as possible on transactions with associated companies overseas). South African tax rates tend to be high for developing countries, but low in relation to developed countries (Steenekamp, 2007). A separate report by the Davis Tax Commission will consider measures to counter aggressive tax planning practices.
4. *Proliferation of tax incentives:* As outlined in Annexure 1 of this report, there has been an increase in tax incentives. However, it is not certain whether the current exemptions and deductions are having the desired effect, whether their size is appropriate relative to other jurisdictions and so on. Evidence to date has been mixed. A recent impact study, for example, was commissioned by the National Treasury to ascertain the economic and social impact, the cost effectiveness and the costs and benefits of the Urban Development Zones tax incentive. This has taken the form of an accelerated depreciation allowance applicable to the value of new buildings, improvements to existing buildings and low cost housing since 2007, estimated at R3.2 billion over seven years since 2003, when it was introduced. The study concludes that there was a beneficial leverage effect since "allowable deductions and

resulting tax foregone (amongst other factors) leveraged capital investment to the value of approximately R14.4 billion" (DEMACON, 2013). However, other evidence suggests that tax incentives may not be efficient. Using multiplier analysis, Calitz et al. (2013) compare a general reduction in corporate income tax rates, financed by the abolition of specific tax incentives, with the status quo. They conclude that the "impact of such a change induced by an overall corporate tax decrease is an increase in output of R56 017 million, which yields a benefit (net increase in output) to cost (total cost of incentive) ratio of 3.6. This is much larger than any of the targeted incentives listed above" (Calitz, Wallace, & Burrows, 2013: 21).

5. *Arbitrage opportunities due to divergences between the top PIT and CIT rates:* This creates an incentive for high net worth individuals to divert their income. There are a number of ways of escaping higher marginal and effective marginal tax rates by means of lower-taxed companies or trusts. For example, by earning income via a company enables income to be taxed at the lower company rate so long as profits are retained within the company. While income may eventually be taxed at the shareholder's marginal rate when this income is eventually distributed as dividends, substantial benefits from tax deferral may accrue if income is retained for a number of years in a company. The reduction in tax liability can be permanent if the dividends are retained in a trust through which a lower rate is paid.

Some of the BEPS' reforms in progress in relation to the asymmetrical treatment of debt and equity include:

1. *Artificial debt*: Some debt instruments will be re-characterised as shares (along with the underlying yield) if they contain certain features. Government's main concern is with so-called debt instruments that do not have a realistic possibility of being repaid in 30 years or debt that is convertible into shares at the request of the issuer. Banks and insurers will be excluded from this re-characterisation.
2. *Connected person debt*: Excessive debt issued to connected person creditors is of concern if the creditor is exempt from tax on the interest, because connected persons can often use debt and equity interchangeably without serious economic consequence. Limits will be imposed so that the interest on this form of debt does not exceed 40 percent of earnings after interest on other debts is taken into account. Excess interest will be allowed to roll over for up to five years.
3. *Acquisition debt:* In corporate restructuring, use of acquisition debt against future earnings effectively eliminates taxable profits for years to come (with the debt often renewed via a new acquisition in later years). Interest on excessive debt will be allowed to roll over for up to five years. This system will replace the discretionary system applied to interest on discretionary debt.
4. *Hybrid debt instruments*: instruments labelled as debt in South Africa (tax deductible payments) and labelled as equity in the other jurisdictions, creating cross-border arbitrage benefits. A two-part approach is taken: (a) Re-characterising certain debt instruments as equity, resulting in the "debt principal" being treated as the underlying shares, and the "interest" yield being deemed to be a distribution thereon (dividends or capital distributions). (b)

Certain “interest” yields will be treated as dividends. A new set of revised hybrid rules adjusting the 2012 proposed hybrid rules was proposed; these mainly target:

- non-redeemable debt
- debt that is convertible to shares at the instance of the company issuer
- debt with non-interest related yields
- debt with repayment terms or yields conditional on the solvency of the company issuer.

3.1.2.2 Equity and fairness

The tax incidence of corporate income tax is not easy to determine since businesses which bear the legal incidence of the tax may shift the economic incidence forward onto consumers or backwards onto labour or shareholders, or some combination of these. An empirical estimation of behavioural responses to changes in corporate tax parameters is thus vital, but little is known in this regard. A tax incidence study in 2005 attempted to estimate the incidence of CIT under a range of assumptions: where the burden of the tax is shifted (a) onto labour (b) backwards onto shareholders, both individual and institutional, such as pension funds and (c) forward onto consumers. The study concluded that the greatest share of corporate tax is borne by the top decile and that as a result, CIT incidence was reasonably progressive, especially in relation to individual shareholders. To the extent that participants in institutional investment, such as pension funds are more evenly distributed across household deciles and because some of the incidence is shifted onto consumers, there is an element of regressivity (Woolard, Simkins & Oosthuizen, 2005).

3.1.2.3 Transparency and certainty

CIT is in general very transparent and certain.

3.1.2.4 Flexibility/buoyancy

While CIT is a significant revenue source, it is also highly cyclical. Recent research on tax elasticities suggests that taxes behave asymmetrically and nonlinearly during expansions and contractions of the business cycle. During an expansion, the CIT elasticity increased by 2.76 percent (compared to 1.89 percent for PIT and 2.17 percent for VAT). During contractions, however, CIT elasticities increased only by 0.88 percent (compared to 0.89 percent for PIT and 0.82 percent for VAT) This may account for a tendency to under-estimate revenue collections during upturns and has implications for achieving structural deficit and revenue collection targets during economic downturns (Jooste & Naraidoo, 2011).

3.1.2.5 Mining taxation

The evaluation findings of the mining sector CIT are broadly similar to other sectors and are therefore not dealt with separately. The mining industry is, however, a highly regulated one and is also subject to a mining royalty regime (as discussed earlier in this document), which does not comprise taxes but resource rents. Furthermore, ascertaining its economic incidence is more complex due to a large proportion of foreign and institutional shareholders in complex corporate structures. The royalty

and other tax dimensions of the mining sector will be dealt with in a separate report by the Davis Tax Commission.
In addition to the issue of tax deductions and exemptions which accrue to the sector, as discussed above and which are reflected in Annexure 1 of the document, the following issues directly related to CIT merit consideration:

- *The continued relevance of the gold mining formula*: Given that gold mining is a declining industry, it may be worth reviewing whether the favourable tax treatment accorded to gold and uranium mining is still justified.
- *Mining capital expenditure deductions* are difficult to determine as the corporate income tax return does not cater for entities engaged in mining activities. Taxpayers usually reflect these deductions under either wear and tear and/or other deductions. These deductions need further research in order to determine the appropriateness both of the design of the exemptions and deductions regime and its administration.
- *Mining Dewatering Association*: Although the tax system contains an exemption for mining rehabilitation entities, a comparable exemption does not exist for a mining dewatering association, which restores water levels adversely impacted by mining. This association is funded by several mining houses in a manner similar to a mining rehabilitation fund. The exemption of this association is under consideration.

The Mining Subcommittee will be releasing a separate report on the mining tax and royalty regime in which some of these issues will be considered in much greater depth.

3.1.3 Value Added Tax

3.1.3.1 Efficiency (economic and administrative)

VAT was introduced in South Africa in September 1991. It replaced General Sales Tax (GST) which was imposed on the sale of a limited number of goods and services to consumers and on capital and intermediate goods acquired by businesses. The South African VAT system is a good example of a modern VAT (in the tradition of countries such as New Zealand). It may be viewed as a consumption tax because the consumer pays tax at the final stage of production. Unlike other indirect taxes and except where VAT-exemption applies (for instance transport and education), it eliminates the cascading effects of taxes on intermediate inputs and therefore does not distort the prices of inputs.[3]
The efficiency cost of taxes arises from their effect on relative prices and the size of this effect is directly related to the tax rate. The distortionary effect of taxes generally increases proportionally to the square of the tax rate. From an efficiency perspective, it is therefore better to raise revenue by imposing a single rate on a broad base rather than dividing that base into segments and imposing differential rates on each segment. In South Africa, most goods are subject to the same standard rate of 14%. This implies that consumer choices are not influenced by differential tax rates, thereby enhancing efficiency and neutrality. Having one

[3] Diamond & Mirrlees **(1971).** show that in order to ensure that production efficiency is attained, inputs should not be taxed so that all taxes should fall on final consumption goods.

uniform rate also reduces the administrative and compliance costs of the tax system and avoids legal wrangling over the classification of goods.

While having one uniform rate which applies to all consumption is optimal from an efficiency point of view, no country in the world has such a system. International comparisons suggest that South Africa has a relatively limited set of well-motivated zero-ratings, which would thus rank as an extremely efficient system.

Certain foodstuffs are zero-rated in order to advance equity considerations (discussed below). Other goods, such as diesel and petrol, are zero-rated as they are instead subject to excise duties. A small number of goods (notably public transport and education) are VAT-exempt because they are regarded as merit goods. Finally, some goods are exempt because they are difficult to tax, e.g. financial services. Zero-ratings and VAT exemptions shrink the tax base and require a higher standard rate in order to compensate for the revenue loss. For the 2011/12 fiscal year, zero rated supplies reduced revenue by R41 billion while exempt supplies reduced revenue by another R1 billion (National Treasury, 2014).

VAT exemptions are considered to be an “aberration in terms of the basic logic of VAT” (Ebrill, 2001). Exemptions go against the core principle of VAT as a tax on (all) consumption and also undermine the efficiency and neutrality of the tax (Bird, 2007). In European countries, where VAT was first introduced, exemptions constitute a very sizeable portion of the potential tax base. By comparison, South Africa compares very favourably, having a very limited number of exemptions; notably certain forms of passenger transport and educational services. Passenger transport by road and rail is exempt for two reasons. Firstly, when VAT was introduced there were concerns that increased bus and train fares would hurt the poor. Secondly, it was considered unfeasible to insist that mini-bus taxi operators register as VAT vendors. In the case of educational services there is a blanket exemption which includes private schools, colleges and universities. Concessions for education are common to most VAT systems, justified on merit grounds. Nevertheless, it could be argued that only Basic Education should be exempt (National Treasury, 2007). *This issue requires further investigation.*

From the standpoint of economic efficiency, all firms should be included in the VAT system so as to minimise distortions of competitive behaviour. However, there is a trade-off between this and the administrative advantages of excluding small traders from whom little revenue could be raised. In South Africa, small firms are excluded from the VAT system in order to reduce the administrative burden, both on these small firms and on the revenue authorities. The registration threshold is currently set at a turnover level of R1 million. The DTC VAT sub-committee should seek more information as to whether this is the right threshold. In order to answer this question, the compliance costs to small vendors as well as the administrative cost to SARS would need to be established.

The South African VAT system follows the destination principle, i.e. exports are zero-rated and imports are subject to VAT. Accordingly, the total tax paid in relation to the supply of goods or services is determined by the rules applicable in the jurisdiction where the supply is consumed; as a result, all revenue accrues to the jurisdiction where the supply to the final consumer occurs. The destination principle has the advantage that it does not affect the competitiveness of exports. There is widespread consensus that the destination principle, with revenue accruing to the country of import where final consumption occurs, is preferable to the origin principle from both a theoretical and practical standpoint. The destination principle is the international norm and is sanctioned by the World Trade Organization rules.

3.1.3.2 Equity, fairness

Having a single uniform rate enhances horizontal equity since individuals with similar expenditure levels will pay the same amount of tax, regardless of their tastes (i.e. how much they spend on particular items).
However, VAT is not vertically equitable. It is widely acknowledged that the poor have a higher average propensity to consume than the rich; i.e. the poor tend to consume everything that they earn while the rich are able to save a portion of their income. Consequently, a broad-based VAT system with a single rate will tend to be regressive (where regressivity/progressivity is measured relative to income).
National Treasury (2007) demonstrates that the zero-rating of specific food stuffs provides a larger *proportional* benefit to the poor (i.e. regressivity is reduced), but provides a larger *absolute* benefit to the rich (who consume larger quantities). It could be argued that the poor would be better served by the elimination of zero-ratings if the additional revenue that were realised were used to increase pro-poor spending on the expenditure side of the budget.
Inchauste et al. (2015) find that the current VAT regime in South Africa is slightly progressive. They note that if the zero-rating of basic food were replaced with the standard rate, VAT would be regressive, with the bottom 60 percent of the distribution paying a higher share of VAT than their share in disposable income.
The destination principle is perceived to be a fair practice because domestically produced and imported goods are treated in the same way.

3.1.3.3 Transparency and certainty

VAT is a highly transparent tax since all invoices must show the amount of VAT included in the sale price. The VAT system entails a trail of invoices that helps improve tax compliance and enforcement. The VAT is, in principle, described as "self-enforcing" because a taxable business can claim for the refund of the input VAT only if the claim is supported by purchase invoices. This mechanism provides strong incentives for firms to keep invoices of their transactions and is an efficient means for tax authorities to check and cross-check for the purpose of enhancing enforcement.
It is important to note that firms which do not register as VAT vendors (either because they are evading tax or because they fall below the threshold for registration) nevertheless pay VAT. While these traders will not pay over VAT on their sales, they will pay VAT on both their imports and their purchases from VAT-compliant firms. The VAT in such cases functions as an unrecovered input tax.

3.1.3.4 Flexibility/buoyancy

VAT is a stable and broad-based source of tax revenue and is an efficient way of collecting a large and buoyant revenue for Government.

3.1.4 Customs duty

3.1.4.1 Efficiency (economic and administrative)

Customs duties (also known as import tariffs) have been progressively reduced as part of an overall strategy of trade liberalisation in post-Apartheid South Africa. Theory suggests that the relationship between import liberalisation and tariff revenue is ambiguous. Similarly, empirical studies also indicate that there is no clear link between import liberalisation and tariff revenue (Edwards & Dunne, 2006).

When imported goods are subject to higher taxes than domestically produced goods, this reduces efficiency as domestic producers are not fully subject to competitive pressure, leading to an inefficient allocation of resources. As a result of its participation in the GATT Uruguay Round, South Africa has significantly reduced its number of tariff lines and bound most to WTO binding levels. It has cut back tariff lines from about eighty different levels in the early 1990s to eight levels ranging from 0 to 30% with a few exceptions, notably in the clothing and textile and motor industry sectors. The general trend has been for tariffs to be reduced to encourage industries to become more competitive and to reduce cost structures too.
However, further progress could be made. High nominal and effective protection remains in sectors such as clothing, textile, footwear and tobacco.

3.1.4.2 Equity, fairness

Using a Computable General Equilibrium (CGE) approach, Mabugu and Chitiga (2007) find that a complete tariff removal on imports would harm the poor in the short-run but reduce poverty in the long-run. When the tariff removal simulation was combined with an increase in total factor productivity, the modelled short and long run effects were both positive in terms of welfare and poverty reduction.
A study (Edwards & Dunne, 2006) discovered that the effect of trade liberalisation has not been uniform across households and industrial sectors. The process has both winners and losers. Trade liberalisation has created new opportunities for exports and growth in services, but has also led to a decline in output and employment in many inefficient and import competing sectors. This makes it difficult to measure the net impact of liberalisation on the poor. Whereas impoverished consumers have gained most from lower tariffs, they have not gained much in terms of employment. This is partly because poor households are largely disconnected from the formal wage economy and labour income in the traded sectors does not overlap geographically with the employed poor; and partly because economic and export growth has been insufficient to draw new entrants into the labour market.
All customs and excise duties collected within the Southern African Customs Union (SACU) are shared according to a complex revenue sharing formula. While customs revenues are of little importance to the South African fiscus, they are of considerable value to the smaller member countries of SACU. For example, in 2014, 60% of government revenues in Swaziland came from SACU customs duties. Government revenue and expenditure in these countries is therefore particularly sensitive to the total amount of customs duties collected. As a result, any reform of import tariffs needs to take account of the impact on households beyond the borders of South Africa.

3.1.4.3 Transparency and certainty

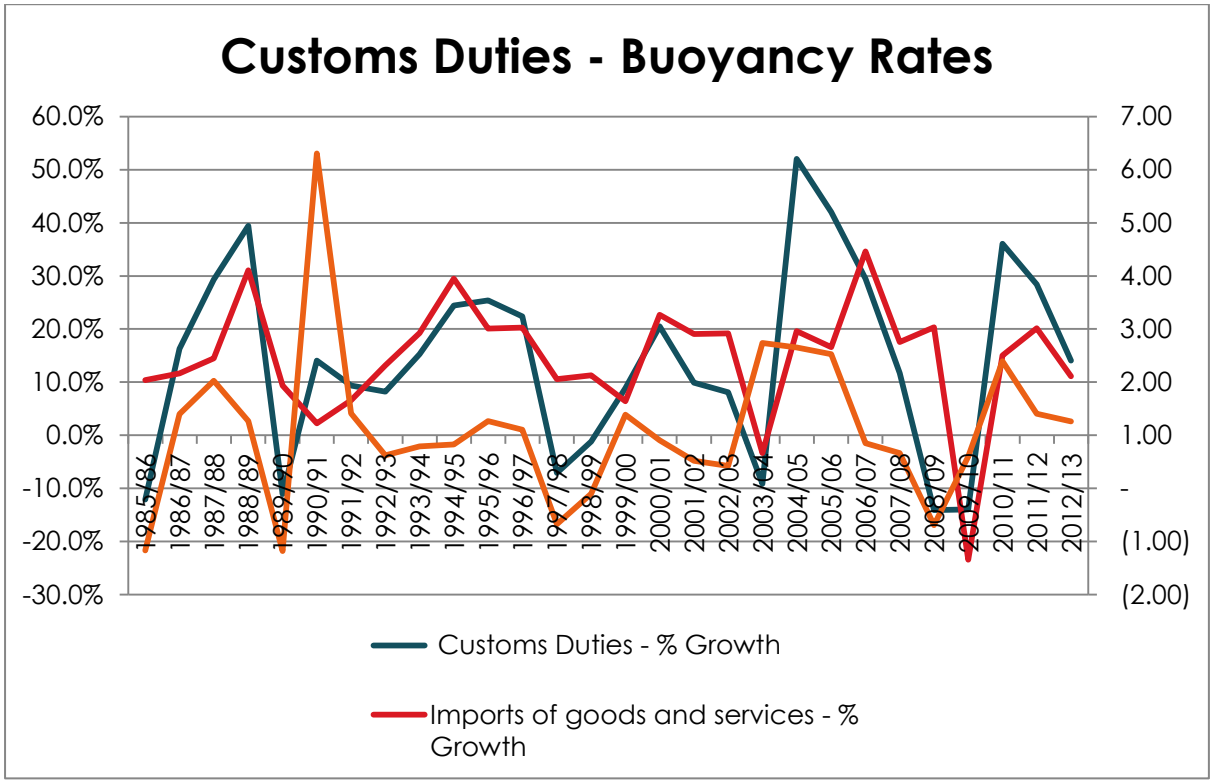
Tariffs are generally ad valorem, contributing significantly to tariff transparency. The reduction in the number of tariff lines has also contributed significantly to transparency and certainty.
The value for customs duty purposes is the transaction value. In cases where the transaction value cannot be ascertained, the price paid for similar goods, adjusted for differences in cost and charges based on distance and mode of transport, is regarded as the transaction value. Alternatively, a computed value may be used based on production costs of the imported goods. In the case of related buyers and sellers, the transaction value will be accepted if, in the opinion of SARS, the relationship does not influence the price, or if the importer proves that the transaction

value approximates to the value of identical or similar goods imported at or about the same time. There are, therefore, certain technical issues which raise the cost of compliance and administration.

3.1.4.4 Flexibility/buoyancy

Imports are particularly sensitive to the business cycle. The figure below illustrates the large fluctuations in revenues from customs duty over the past 30 years.

Figure 1: Customs duties-buoyancy rates, 1986/87 to 2012/13



Source: Special request, SARS (2014)

3.1.5 Excise duty

Excise taxes are selective taxes on goods and services, whether imported or locally produced. In South Africa, specific excise duties are levied on alcohol and tobacco while *ad valorem* excise duties are levied on "luxury" items such as cosmetics, televisions and motor vehicles. Specific excise duties contribute about 3.5% to tax revenue; whereas ad valorem duty contributes only about 0.3% of tax revenue. While ad valorem duties are relatively insignificant as a source of revenue, they have a very specific goal (that of enhancing equity) which merits discussion.

3.1.5.1 Efficiency (economic and administrative)

Excise taxes levied on alcohol and tobacco aim to correct a market failure, namely that the negative external costs of these products are not necessarily reflected in the retail price of these goods. As such, these taxes are deliberately designed to distort consumer behaviour. By raising the price of socially harmful goods, such as alcohol and tobacco, demand is reduced.

Economy-wide modelling (PROVIDE, 2006) has been used to show that an increase of 10% in excise duties on alcohol would reduce real household consumption

expenditure by over R300 million (in 2006 prices) and cause a loss of almost 7500 jobs, mainly in the agricultural sector. However, the authors of this study emphasise that they did not take the negative externalities associated with excessive alcohol consumption, such as productivity loss, foetal alcohol syndrome or traffic accidents into account. In other words, the results do not capture the benefits from any reduction in negative externalities following the decline in demand due to a price increase in alcoholic beverages; hence, their estimates represent an upper bound of any welfare losses.

Ad valorem excise duties are selectively applied to a small range of goods. As such, they distort the price of certain ("luxury") goods and create deadweight losses. Therefore, from a purely economic efficiency standpoint, ad valorem taxes are inefficient. The deadweight loss is a function of the square of the tax rate, thus the higher the rate, the more inefficient the tax.

Administratively, excise duties are expensive to collect. In the case of ad valorem duties, the schedules are relatively complex and the classification of goods into the correct category is a labour-intensive process, which has imposed an administrative burden on both the revenue authorities and firms. In the case of the specific excise taxes, the high rates imposed on alcohol and tobacco require extensive and expensive efforts to curb tax evasion.

3.1.5.2 Equity, fairness

Taxes on alcohol and tobacco are undoubtedly regressive (Bird & Wallace, 2006 and PROVIDE, 2006). While the poor spend less on alcohol and tobacco in absolute terms, these items make up a larger proportion of their overall household consumption. Specific excise duties are particularly regressive because the tax is based on quantity rather than price. For example, the current excise duty (in 2014) on a litre of wine is R2.87, i.e. R2.15 per 750 ml bottle. Whereas an impoverished person may buy a bottle of wine for R20 (and thus be paying a tax rate of 12%), a rich person may purchase one for R200 (and thus only incur a 1% tax).

Ad valorem duties on luxury goods are intended to be progressive as they target goods which are more likely to be consumed by the non-poor, such as motor vehicles, perfume and golf clubs. While some of the items that incur ad valorem excise duty are also consumed by the poor – e.g. cell phones and television sets – these are items where large price and quality differentials exist; hence the regressivity is less pronounced than in the case of specific duties.

3.1.5.3 Transparency and certainty

The excise duty schedule is relatively simple and transparent. For example, the alcohol excise duty rate structure differentiates between alcoholic beverages in accordance with benchmarks determined in 2002 and adjusted in 2012. The total consumption tax burden (excise duties plus VAT) as a percentage of the weighted average retail selling price for wine, clear beer and spirits was set at 23, 33, and 43 percent respectively in 2002. In the 2012/13 fiscal year the targets for beer and spirits were raised to 35 and 48 percent respectively. Annual adjustments are made to maintain the targeted indirect tax burdens (National Treasury, 2014).

3.1.5.4 Flexibility/buoyancy

The Davis Tax Committee was unable to find any empirically based estimates of the buoyancy of excise duties in South Africa. Theoretically, one would expect that revenue from specific excise duties on alcohol and tobacco would be relatively

unresponsive to changes in the tax base since the demand for these goods is quite inelastic.

3.2 Summary of individual tax handles

Table 16, below, summarises the assessment of the individual tax handles in relation to an effective tax system.

Table 1: Evaluation of the major South African tax handles against the principles of a good tax system

A Good Tax System	Current SA Tax System
VAT	
1. Efficiency (economic and administrative)	VAT is an efficient, broad-based tax with few zero-ratings and exemptions, ensuring minimal distortions. Small vendors are excluded to increase administrative efficiency.
2. Equity, fairness	VAT is mildly progressive due to zero-rating
3.Transparency and certainty	VAT is transparent; high degree of certainty.
4. Flexibility/Buoyancy	VAT is a buoyant tax.
Customs Duties	
1. Efficiency (economic and administrative)	Quite efficient. Customs duties are low and generally well aligned with excise duties.
2. Equity, fairness	Somewhat progressive as some luxury items attract a higher rate of customs duty.
3.Transparency and certainty	Quite transparent and simple to apply
4. Flexibility/Buoyancy	Revenue follows the business cycle, thus being buoyant.
Excise Duties	
1. Efficiency (economic and administrative)	Helps to internalise the cost of externalities associated with drinking and smoking. Administrative burden for the revenue authorities is high.
2. Equity, fairness	Ad valorem duties are progressive while specific duties are regressive.
3. Transparency and certainty	Quite transparent; relatively simple to apply by international standards.
4. Flexibility/Buoyancy	Revenue is not very responsive to the business cycle.
Personal income tax	
1. Efficiency (economic and administrative)	There are concerns that high marginal tax rates disincentivise labour supply (either in terms of participation or working hours). The international mobility of skilled and semi-skilled workers in an internationally integrated labour market represents a further factor to be considered.
2. Equity, fairness	The PIT structure is progressive. The PIT reforms over the last two decades have not really resulted in an improvement of the income distribution. Furthermore, there is some consensus that personal income taxation is not a very suitable instrument for redistribution purposes in developing countries (Steenekamp T. , 2012a).To the extent that capital gains accrue primarily to upper income taxpayers, the progressivity of the income tax and hence the vertical equity of the tax system were enhanced.
3. Transparency and certainty	The simplification of the PIT system and the introduction of e-filing have made the system admirably transparent and simple.

A Good Tax System	Current SA Tax System
	Transparency is also enhanced by the fact that the bracket creep is kept in check by regular adjustments of the brackets and rebates on an ad hoc basis.
4. Flexibility/Buoyancy	The PIT is an automatic stabiliser due to its built-in flexibility to counter-cyclical economic behaviour.
Corporate income tax	
1. Efficiency (economic and administrative)	Economically inefficient and non-neutral. Effectiveness of the incentive regime is uncertain.
2. Equity, fairness	Fairly progressive in that the top decile bears most of the incidence. This is somewhat offset by regressive elements associated with shifting of the incidence onto consumers and to institutional investors such as pension funds.
3.Transparency and certainty	Relatively transparent and certain, although complex.
4. Flexibility/Buoyancy	Very cyclical in nature, contracts markedly in recessions and lingers, because past assessed losses are offset against taxable income in later years. CIT is a buoyant tax.

3.3 Holistic Assessment of the Tax System

As pointed out earlier, most taxes influence people's behaviour in distortionary ways and all reduce the welfare of those who bear their economic burden. The challenge for tax design is to finance the achievement of social and economic policy objectives while minimising these welfare-reducing side effects. In achieving the overall objectives of the tax system, it is important to consider all taxes (and transfer payments) together as a system (taking a systemic and holistic view) while at the same time being clear about the role of each tax within the system. Furthermore, it is important to note that it is the redistributive impact of the system as a whole which needs to be measured and judged. As long as the overall system is progressive, not every tax needs to be so (Mirrlees et al., 2011). The evaluation of a tax system should always be informed by the benefits to the public through effective and efficient public expenditure, and the distribution of both the benefits and the burden of taxation. The revenue side cannot be divorced from the expenditure side. The developmental impact of public expenditure legitimises the system of taxation. In other words, the combined effects of an appropriate tax system and an efficient and productive expenditure system ensure that the fiscal system supports economic growth (National Treasury, 2012).

The cost of revenue collection (calculated by dividing the cost of internal operations by total tax revenue collected) – an important indicator of the efficiency of a revenue administration – has remained between 1.17% in the 2009/10 financial year and 0.97% in the 2013/14 financial year. The ratio in the financial year 2012/13 was 1.07%. Internationally, the benchmark is 1% (SARS, 2013; National Treasury, 2014; SARS/NT, 2013).

Table 2: Overall assessment of the South African tax system against the criteria for a good tax system

A Good Tax System	Current Overall SA Tax System
1. Neutrality *The tax system must produce sufficient income for the state, with minimum distortions to the economy*.	Not enough empirical evidence on behavioural responses to ascertain whether the South African tax system is neutral.
2. Simplicity *As far as possible, taxes should be simple to understand and should be collected in a timely and convenient manner*	Tax reforms have made the system simpler and somewhat reduced loopholes. Simplicity, ease of administration and lower compliance costs are important and must be enhanced. Tax policy simplification should attempt to integrate the small business tax systems within the general tax system.
3. Stability *The tax system must support macroeconomic stability*	In good times, tax levels rise while in bad times they fall, providing an automatic stabiliser to the economy. It is important to ensure that the tax system contributes towards the counter-cyclical fiscal policy framework. However, the tax system tends to be cyclical because of the high proportion of company taxes in the tax system.
4. Revenue Adequacy *The tax system must raise sufficient revenue to meet Government's expenditure needs and foster a stable macroeconomic environment.*[4]	Tax revenue as a percentage of GDP (Tax/GDP ratio) has remained steady, averaging 25% during between 2010/11 and 2012/13. This is nevertheless, significantly lower than the percentage achieved before the global financial crisis when the Tax/ GDP ratios exceeded 27%. The revenue raising potential of the tax system must not be compromised.

Overall, tax reform initiatives must be guided by the following general principles:

- The long-run objective for all economic policy instruments is to support sustainable growth and employment. Efficient allocation and use of all resources, including tax revenue, are key in pursuing these objectives
- The primary priority for tax reform must be to remove distortions within the tax system in order to move toward greater neutrality in the tax system. This would prevent arbitrage to avoid paying taxes, and encourage decision making based on economic fundamentals
- The tax system must be stable and buoyant, ensuring a steady revenue stream for Government
- The total tax to GDP ratio should be reasonable and appropriate to finance the country's development needs
- The tax system functions as an interconnected system and the impacts as a result of changes to individual tax instruments should be evaluated holistically.
- The number of separate tax instruments and the volume of provisions should be limited to prevent fragmentation of the tax bases
- An appropriate mix is sought between taxes on consumption, income and wealth
- The overall tax system should remain progressive. It should be noted, however, that redistribution is often more effective through appropriate and efficient Government expenditure programmes

[4] For a more accurate assessment, a sense of the overall magnitude of the government's expenditure needs must be established.

- Tax rates should be set at appropriate levels to minimise distortions of economic activity and reduce the disincentive effects on work effort, savings and investment
- Minimal use should be made of tax incentives and a thorough analysis of objectives and alternatives must be undertaken before incentives are considered. When tax incentives are introduced, a thorough system for monitoring and evaluation should also be designed
- There is a need to minimise administration and compliance costs
- Tax reform should be a transparent process, built on broad moral consensus regarding the most appropriate tax regime for the particular social, economic and political circumstances of South Africa (National Treasury, 2012).

4 AREAS FOR FURTHER RESEARCH

The key challenge of the Davis Tax Committee is to devise/strengthen tax policies that will be perceived to be "fair" and help build social cohesion while supporting inclusive growth. As has been earlier noted in this document, the *NDP Vision 2030* highlights the need to improve public infrastructure, finance NHI and comprehensive social security reform as well as expand vocational training, amongst other objectives. In addition to these longer term policy objectives, in the medium term the need for fiscal consolidation is likely to dominate the fiscal policy discourse. While fiscal consolidation must begin with expenditure reprioritisation, improvements in the effectiveness of public spending, the elimination of corruption and the reduction in wasteful spending, the issue of raising additional revenue cannot be ruled out. Can this be achieved by improving compliance and broadening the tax base or will statutory tax rates need to be raised? If tax rates need to be raised, which taxes will be the least distortionary? How do we balance efficiency and equity considerations?
In order to pursue a sensible tax policy it is essential to perceive the tax system as a system rather than to consider its different elements in isolation (Mirrlees, 2010). We need to look at the overall effects of any reform on the fiscal regime as a whole and not just at whether individual taxes are progressive or regressive. The distribution of household disposable incomes depends on both taxes and on the benefits financed through those tax revenues. Raising indirect tax rates, for instance, is regressive, but the overall impact can still be progressive if these effects are offset by benefit changes on the expenditure side. For example, increased social grants may be a more efficient way of increasing the disposable income of poorer households, than reducing the rates of indirect taxes.

Identifying tax policy research gaps
The brief foray into the international tax literature in this Framework Document reveals that, while there are several theoretical models, empirical findings are sometimes ambiguous and highly context specific. While international trends are certainly useful benchmarks (especially in relation to other emerging markets and African counterparts), these are mediated by so many other factors (e.g. the level, composition and impact of public spending, the structure of the economy, political and labour market institutions and so forth), that they serve as useful points of departure but cannot be authoritative.

Rather surprisingly, given the importance of the tax system, there is very little recent quantitative analysis of the nexus between the tax system, growth and employment in South Africa, either within Government or in academia. A growing body of South African empirical literature exists in relation to certain tax instruments e.g. personal income tax and VAT. However, comparatively little work has been done on the economic impact at macro, sector and firm level in relation to CIT or CGT, for instance. There is also greater emphasis on the equity dimension and the progressivity of the tax system and individual tax handles, rather than their economic efficiency.

Our efforts to review the South African literature suggest that there are large gaps in knowledge. Some unanswered questions (to name but a few) that have stemmed from our deliberations to date (and for which systematic empirical evidence is lacking) include:

- What is the relationship between economic growth, employment and tax rates and structure in South Africa? How best should we think about the mechanisms linking growth and tax rates (especially if inequality is inimical to growth)?
- How do we close the tax gap (compliance and revenue adequacy)?
- What is the relationship between marginal personal income tax rates and labour supply and how does this alter along with changing income levels?
- To what extent do higher tax rates discourage investment in human capital and entrepreneurship?
- What are the effective tax rates on different economic sectors, especially given the potentially wide deviation from statutory rates?
- Empirically, have incentives worked, in terms of quantum and timing of additional investment and employment (in terms of participation and hours worked) relative to the size of the subsidy?
- What is the extent of user charges in South Africa? How have they evolved post-Katz? What should be the weight accorded to the benefit principle of equity as opposed to the ability to pay?
- How can the tax system be altered in order to encourage the formalisation of the informal sector?
- Is there a case for additional provincial and municipal tax instruments? For instance, should a local business tax be considered?

The above list of issues alone constitutes a rather formidable long term agenda. In the short to medium term it is unlikely that conclusive evidence will be available for all these issues. It is the DTC's fervent wish that academia and other research institutions will engage with tax policy issues such as these, to a much greater extent.

Data availability has been a key constraint on the ability of researchers to engage in empirical tax policy research. SARS has begun to make aggregated tax data available annually in its *Tax Statistics* publication on its website. This is highly commendable. However, understanding behavioural responses often requires analysis at the individual taxpayer level. Striking the balance between a sufficient level of aggregation for credible empirical research and preserving taxpayer confidentiality becomes a complex terrain to negotiate. Pooling data from different data sets can also pose a formidable challenge. For example, when SARS'

administrative classification systems differ from the Standard Industrial Classification, the former need to be reconciled.

The lack of an existing, comprehensive, analytically sound body of econometric knowledge poses a very real obstacle to the Davis Committee's aspiration to present defensible, evidence-based recommendations within a systematic, internally consistent macro framework. The current research base is sparse and there is an array of empirical unknowns and data as well as other constraints.
While there is some work that examines tax structure and economic growth (e.g. Koch, Schoeman & van Tonder, 2005) we were unable to find any work that comprehensively investigated tax structure, employment and growth in an economy-wide framework, as well as the related distributional impacts. Existing macroeconomic models are designed to study marginal changes in tax policy. Moreover, the welfare effects of small tax reforms are typically analysed through a static micro-simulation approach that ignores behavioural effects. In practice, however, all tax reforms are necessarily small, making it foolhardy to simply ignore the behavioural responses.
To understand the relationship between tax, economic growth and employment, economy-wide quantitative analysis would be important to inform the Davis Tax Committee's deliberations. However, such work will be extremely difficult to accomplish for a number of reasons: the questions we are asking may not be conceptually answerable given the current status of econometric tools; even if the techniques are feasible, the skills and data to execute the approach effectively may not be available to the Committee.

Cutting edge research in countries such as Germany has yielded modelling approaches which may not be relevant or replicable here. These modelling approaches employ macroeconomic and economy-wide (computable general equilibrium (CGE)) modelling techniques as well as micro simulation modelling so as to fine tune and empirically validate the relationships between taxes and the economy which are assumed by the CGE models.
The micro modelling would ideally contain two parts: the first would look at determining effective tax rates which influence actual economic behaviour (i.e. inclusive of deductions and exemptions) rather than the statutory rates. The second component of the micro work would look at the distributional impact of tax changes on the household sector, the cost-benefit analysis of tax incentives on firms in particular sectors, etc. Such a comprehensive, integrated modelling approach is very skills intensive and requires expertise in a number of economics specialities (i.e. econometric macro modelling, tax analysis and micro-simulation of households' and firms' responses).

Laying the foundations of quality empirical tax research in South Africa: DTC progress to date
In order to address some of these gaps, the Davis Tax Committee has sought to collaborate with key stakeholders in the research projects listed below:

1. **Estimating sectoral marginal effective tax rates and average effective tax rates** for the South African economy: The DTC has solicited technical support from a World Bank team and a researcher from the University of Stellenbosch to update a previous study conducted in 2006.

2. **Mining sector regime benchmarking**: The IMF will be applying their Fiscal Analysis of the Resource Industries (FARI) model to South Africa to explore the economic linkages vis-à-vis the mining sector, economic growth, balance of payments, tax and royalty revenues in a number of scenarios and compare the findings to countries in Africa and elsewhere.
3. **Economic impact of VAT:** The National Treasury is currently undertaking modelling of tax revenues, economic growth, employment, investment, consumption and household welfare.
4. **The impact of the tax system on the factor intensity of production**: The aim of this project would be to assess whether the current tax regime (e.g. through capital depreciation allowances and other incentives) has systematically encouraged capital intensive production methods rather than labour intensive ones. This research will be conducted by the National Treasury.
5. **Measuring the VAT gap**: The IMF and SARS are collaborating on a project to measure the difference between potential VAT revenue and actual tax collections. The work will measure the "policy gap" (i.e. revenue that is foregone because of zero-ratings, exemptions, special treatments) and the "compliance gap". This will clarify whether there are possible strategies for mobilising additional revenue without changing the standard VAT rate.

While these projects are an important start to building a rigorous body of tax policy research, the DTC recognises that achieving this can only result from collaboration between all research institutions with the capacity to conduct tax policy research. To this end, the DTC has already begun engaging with academic researchers active within the field and other research institutions to communicate these research gaps and encourage the pursuit of a long term research agenda which speaks to these pressing yet perplexing tax policy issues.

5 KEY THEMES

The previous section outlined the various gaps in knowledge about the South African tax system. This section outlines the key themes and findings of this Framework Document and their implications for the Davis Tax Committee.

1. The primary challenge of the South African tax system is to achieve revenue adequacy while supporting growth that would stimulate employment and reduce poverty and inequality. There are concerns that the potential output of the South African economy has declined (rather than merely reflecting cyclical fluctuations), which would have serious consequences for tax policy in a chronically weak global economy. The accumulation of public debt will limit borrowing in the medium term, especially given credit rating downgrade pressures on the sovereign rating. The increase in the public sector compensation of employees as a share of total spending creates increased spending rigidities which are difficult to adjust downwards, unless increases in public sector wages can be curtailed in the forthcoming public sector wage bargaining round or a decrease in public sector employment occurs (in an environment where private sector employment is subdued).

2. The tax system consists of a number of different tax instruments with different objectives: PIT is redistributive and imparts a strong element of progressivity in the system. Inchauste et al. (2015) demonstrate that the top 10 percent of households paid 87 percent of the total personal income tax yield. The CIT and CGT also help to ensure a fair distribution of the tax burden, but in a globally integrated economy they must also be competitive to attract investment. The broad based VAT system raises revenue fairly efficiently, while zero rating mitigates much potential regressivity. The same study by Inchauste et al. (2015) has even found VAT to be mildly progressive (because of the zero-ratings on basic food items): an unexpected finding. Excise taxes on alcohol and tobacco are regressive, but have a strong public health policy rationale.

3. Overall, the tax system is slightly progressive, with progressive direct taxes compensating for more regressive indirect taxes. However, the South African tax system is less progressive than countries such as Brazil and Mexico, indicating that there may be some room for more progressivity in the tax system. The Kakwani Index is a measure of tax progressivity. If greater than zero, the index would suggest a progressive tax system, if equal to zero a neutral one while a negative index would suggest a regressive tax system where the poor pay proportionally more of their share of income in tax compared to the richer income deciles. The Kakwani Index is 0.028 for South Africa (Inchauste et al. (2015), which is broadly similar to Brazil (0.039) (Higgins & Perreira, 2014) but much lower than a country such as Mexico (0.109) (Scott, 2014).

4. It is difficult, nevertheless, to assess the impact of the tax system on inclusive growth, without simultaneously considering the impact of public expenditure. Recent studies, such as the 2014 World Bank Report, *Fiscal Policy and Redistribution in an Unequal Society* confirm that South African public spending is highly progressive: social grants are well targeted and the access of the poor to basic services such as health, education, water, sanitation and electricity has improved markedly. All of these contribute substantially to reduction of poverty and inequality. The poorest 10% of households receive public services and grants to the value of R 6 900 per capita per year from Government (or $945 in 2010/11) while paying R724 ($99) in taxes (such as VAT and excises).

5. The quality of education and health remains a serious problem. Despite additional public funds being pumped into social and economic infrastructure, delivery, water and electricity infrastructure pose binding constraints to economic growth. Because of poor delivery capacity, unspent budget allocations co-exist with service backlogs; in addition, serial and material overspending on infrastructure projects is a regular occurrence, as evidenced by Auditor General Reports. High levels of inefficiency of public service spending, waste and outright corruption persist.

6. As compared to other developing countries, the South African tax and public expenditure system is highly efficient in redistribution. However, because income inequality is so extreme to begin with, the outcome after fiscal policy remains greater than in comparable developing countries. In 2010, the fiscal system reduced South Africa's Gini Coefficient from 0.771 to 0.596 after fiscal policy was applied. By contrast, Brazil's Gini Coefficient in 2009 is 0.579 (lower than the

South African Gini even after fiscal policy has been implemented) and declines to 0.439 after fiscal policy has been applied.

7. Achieving NDP aspirations of a reduction in poverty and inequality and its laudable ambitions for national health insurance and social security reform, in a very tight fiscal environment will require more effective uses of available public resources. These include expenditure reprioritisation and impact reform, improving the administration (e.g. transfer pricing, BEPS) and estate planning loopholes which allow the rich to avoid paying their fair share, as well as using the tax system to finance these policies in a manner which is as inclusive and growth enhancing as possible.

8. For a number of reasons, not much is known about the efficiency of corporate taxation, including issues such as the lack of survey data at the level of the firm and the need to maintain taxpayer confidentiality in highly concentrated industries, amongst other factors. Preliminary research indicates that the average effective tax rate (the ratio of a company's tax liability to its net pre-tax accounting profit) varies substantially by sector. Average effective tax rates may diverge from the statutory CIT rate of 28%, as some companies are liable for CIT at different rates due to special dispensations and deductions. This raises questions about the horizontal equity and the economic efficiency of the corporate income tax system, which requires further investigation by the Davis Tax Committee.

9. The marginal effective tax rate (METR) is a measure of the effective rate of tax imposed on the rate of return generated by the last, or marginal, unit of capital in which a firm invests. The METR gives an indication of the differences across economic sectors of the tax cost associated with R1 of extra investment. It therefore reflects how the effective after-tax returns to new investments differ between sectors. Initial research suggests that METRs also differ markedly across sectors, being negative in sectors which can access capital tax deductions and other investment incentives (such as manufacturing). It is important that the METRs which are a product of the tax system be aligned with industrial policy. The Davis Tax Committee has requested the World Bank provide technical assistance in determining and analysing average and marginal effective tax rates across sectors in South Africa.

10. In general, a survey of relevant South African research and of submissions received by the DTC indicates that the tax system does not emerge as a major impediment to growth per se. The tax challenges were considerably overshadowed by policy uncertainty in relation to property rights (e.g. in the mining, agriculture and other sectors), labour market issues, infrastructure constraints on water and electricity, other forms of regulatory red tape and so on. However an argument which frequently recurred was the need for increased tax incentives as a "sweetener" to counteract the policy uncertainties and attract investments. Small and medium sized enterprises have their own specific challenges; these were dealt with in a separate DTC report. The overall complexity of the corporate income tax system is a cause for concern and simplification should be a priority.

11. Base erosion and profit shifting concerns loom large, but this too is the subject of a separate DTC report, which will discuss the protection of the South African tax base in detail.

6 CONCLUDING REMARKS

Ideally, NDP priorities should be financed from increased tax revenues generated as a result of stronger economic growth, improved tax compliance, expenditure reprioritisation, elimination of inefficiency and corruption and increased effectiveness of public spending. Should the tax system be required to generate additional revenue, the Davis Tax Committee should bear in mind the following long term principles in order to minimise the impact on economic growth and employment:

a. *Progressivity in the overall tax system is an important consideration and we recognise the need to enhance this.* However, it is important to note that a great deal of redistribution happens on the expenditure side of the budget. Higher direct taxes are likely to reduce growth which will, in turn, reduce tax revenue and limit the ability of the fiscal system to redistribute in the future.
b. *If increased revenue becomes important, trade-offs associated with the choice of tax mix should be carefully considered in terms of their impact on inclusive growth.* As discussed in Section 9 above, at the request of the DTC, the National Treasury has modelled a number of simulations. An increase in PIT would need to be 6 percentage points and the increase in CIT would need to be 5 percentage points in order to realise the same revenue as a 3 percentage point increase in VAT. While there would be a negative impact on GDP and employment – particularly in the short-run – the impact of a VAT increase on these two variables would be less severe than that of a rise in PIT or CIT. An increase in VAT would be less distortionary than an increase in PIT or CIT but would counter the overall progressivity of the tax system and be somewhat inflationary in the short run. Increases in PIT, on the other hand, could enhance progressivity but may encourage tax avoidance behaviours, reduce labour supply, prompt the flight of those who are skilled and undermine incentives for entrepreneurship.
c. *The tax system must not be used to offset pathologies in other parts of the system (e.g. in respect of property rights or labour market challenges).* If other elements of public policy are unclear or problematic, these should be dealt with at source and not compensated for by the tax system.

While measures may be taken in the short term to raise additional revenue, these should not compromise these longer term objectives of the tax system geared to stimulating inclusive growth.

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