Economic Consequences of Trump's Proposed Policies

Laurent Cretegny[*]

KPMG Economics, Australia
KPMG Institute for Global Risk, Australia

Draft, April 2017 – Not to be quoted

Abstract

While Donald Trump has been short on economic policy details during his campaign, he has nevertheless promised substantial changes in many areas, including both fiscal and trade policies. Their consequences on the US economy, however, are likely to work in opposite directions. In addition, the government is required to balance its budget in the long run through distorting taxes that will lead ultimately to losses in economic efficiency.

Results are developed through the application of KPMG Global which has been extended to include a public sector account that links government expenditures to tax revenues. The core model of KPMG Global is based on the 2014 world economy from the GTAP 10 database and the government budget in each region is calibrated to empirical evidence so that it reflects the balance (either deficit or surplus) reported in international statistics.

Preliminary simulation results show that the economic consequences on the US economy of both tax cuts and rising spending along with tariff barriers on manufactured imports are negative with a 0.8 per cent decrease in real GDP in the long run, as compared to a situation of business-as-usual. As expected, fiscal policy alone has a positive impact on GDP (+0.5%) and trade policy alone has a negative effect on GDP (-1.3%).

1   Introduction

While Donald Trump has been short on economic policy details during his campaign, he has nevertheless promised substantial changes in many areas, including both fiscal and trade policies. Their consequences on the US economy, however, are likely to work in opposite directions. On the one hand, fiscal expansion could restore deficient aggregate demand and boost the performance of the US economy, which would cause inflation to rise and push up long-term interest rates. It would result in a sharp appreciation of the US dollar as investors seek higher returns on investment and foreign capital flow in to finance rising US fiscal deficits. On the other hand, a protectionist shift may not help American manufacturers since US exports would need to be diverted for meeting domestic demand if imports decreased due to higher tariffs. In addition, as the US economy is near full employment with no pro-immigration policy in place, resources would have to be taken away from other sectors which may worsen further the performance of the US economy.

This paper aims to analyse the relative economic impacts on a set of world regions associated with Trump's economic policy proposals, as compared to a situation of business-as-usual. In particular, it looks at the economic consequences on the US economy of both tax cuts and rising spending along with tariff barriers on manufactured imports.

Results are developed through the application of KPMG Global, a dynamic multiregional CGE model based on the 2014 world economy from the GTAP 10 database. For the purpose of the study, countries are aggregated into ten regions and industries into ten sectors.

The simulation of Trump's potential economic policies requires a public sector account in order to assess long run economic consequences. The current version of KPMG Global does not link government expenditures to tax revenues. In the long run, however, the government is required to balance its budget so that an increase in welfare cannot be attained by exclusively ever-rising budget deficits. The introduction of a government account into KPMG Global will, in addition, ease the analysis of the government budget. As increased fiscal spending will positively affect public expenditure, and tax cuts and raised tariffs will, respectively, lower and increase government revenue, the representation of a government account will make straightforward the net impact on the government budget.

The government budget is calibrated to empirical evidence so that it reflects the balance (either deficit or surplus) reported in international statistics. As such, KPMG Global needs to be extended to include government transfer payments to households (including retirement income, unemployment benefits and family allowance). In the counterfactual, the government can maintain its initial budget balanced either via a lump sum transfer with households or via other tax instruments.

The calibration of the dynamic multiregional CGE model involves developing globally consistent baseline growth paths for each of the regional economies. Development of a world baseline involves introducing to the dynamic model demographic, macroeconomic and sectoral productivity forecasts for each region as well as expected policy changes in each region. These projections are based on the latest development in the literature.

The design of the policy scenarios considers three simulations. The first two scenarios simulate fiscal and trade policies separately, while the last scenario simulates both sets of policies simultaneously. Potential US fiscal measures considered in this study include reductions in the corporate tax rate and personal incomes taxes, as well as an increase in infrastructure and defence spending. Tax cuts are calibrated to match the fall in receipts estimated by the Tax Policy Center (Nunns et al., 2016). Rising public spending are taken from projections developed in the OECD Economic Outlook (OECD, 2016). Trade measures are based on Trump's proposed tariffs on China, Mexico and Japan set out in the NFAP Policy Brief (Tuerck et al., 2016).

The remainder of this paper is organized as follows. Section 2 outlines the core of KPMG Global along with the theoretical extensions. The following section focuses on closure specification as well as the development of globally consistent baseline. The design and modelling of policy scenarios is presented in Section 4 together with a discussion on the results of potential Trumps's policies. The final section summarizes and concludes.

2   The Global Economic Model

The model is formulated as a system of linearized equalities derived from a highly nonlinear system of equations representing behavioural and definitional relationships and is solved using the GEMPACK economic modelling software (Harrison & Pearson, 1996).

2.1   Core description

The dynamic global CGE model used in this study, termed *KPMG Global*, has been developed through several stages. It was originally a comparative-static model (Cretegny, 2014) which has been then adapted into a dynamic version (Cretegny, 2015). It has been further extended to allow relevant policy simulations to be conducted in this study. It is Walrasian in spirit and along the lines of models used for applied international trade policy (Shoven & Whalley, 1984). The core theoretical specification of the static model at the regional level draws upon the long Johansen/MONASH tradition in CGE modelling (Dixon, Koopman, & Rimmer, 2013). The macroeconomic closure at the global level is based on the well-known GTAP model (Hertel & Tsigas, 1997). The particularities of the global CGE model are threefold. The first particularity lies in the representation of the regional demand for a given commodity from a specific region that is differentiated for each of these users. The second originality is the specification of investment at the industry level rather than at the aggregate level. This allows the determination of industry-specific rates of return and the reallocation of investment across industries to be affected by relative rates of return. The last particularity is related to the treatment of the government sector. In this paper we describe the explicit specification of the public-sector account, which is necessary for maintaining revenue neutrality of the government budget in fiscal policy simulations.

Introducing dynamics in computable general equilibrium models allows the calculation of the transition path from the initial equilibrium to the new equilibrium. In the context of our work the assumption of investors' perfect foresight of returns to capital is not appropriate. During the Asian financial crisis at the end of last century, investors massively withdrew their investment in the region following downward adjustment in the expectations. This acknowledgment of errors in their expectations suggests that they have not foreseen perfectly the returns to capital and shows the

importance of modelling errors in investors' expectations. Therefore our model assumes myopic agents and introduces adaptive expectations about rates of return on installed capital in each region equalizing across regions in the long run (Ianchovichina & McDougall, 2012).

2.2   Government behaviour

In the original version of KPMG global, welfare in each region depends on private consumption, government spending and savings, which are determined as part of a single Cobb-Douglas utility maximization problem. Regional income is thus allocated in fixed shares to current consumption, government services and investment. This implies a fixed savings rate and resulting regional savings are assumed to finance domestic and/or foreign investment. Taxes accrue to the region as a whole so government revenue is not linked to government spending.

The most significant drawback of this formulation is the implicit assumption that the government maintains its budget balanced via lump-sum transfers to or from private households. The consequences are twofold. The first implication is that the government cannot run any deficit in short run simulations. The second consequence is the inability of the model to conduct budget-neutral fiscal policy experiments.

A natural solution to this formulation is to make the government financially independent by specifying a separate utility maximisation problem for the government subject to its own budget constraint. The utility is defined by aggregated public consumption and the income by the total of both direct and indirect taxes revenue.

The stylized representation of the government's behaviour comprises three equations as described below. The first equation is similar to the original equation (Cretegny, 2014) and defines the relationship between the price of public consumption, p_G, and the price of private consumption, p_C. This can be expressed in linearised percentage-change form by the following equation:

$$p_G = p_C + f_G \tag{R-9}$$

where f_G is an exogenous shift variable allowing for changes in the ratio of public consumption price to private consumption price.

The consumption function for the government however differs from the original equation since it depends now on its own real income, y_G, and may be expressed by the following equation in linearised percentage-change form:

$$g = \gamma_G + (y_G + p_{MP}) - p_G \tag{R-10}$$

where g and p_{MP} are the real public consumption and the market-price GDP deflator, respectively, and γ_G is the government's marginal propensity to consume.

As mentioned earlier the government has its own income, which consists in the economy-wide revenue from indirect taxes net of subsidies on trade, production and consumption. In addition it also collects direct taxes on primary-factor income from households. As such, government real income can be represented in the stylized model by the following equation in linearised percentage-change form:

$$y_G = S_{DT}^G \cdot y_{DT} + S_{IT}^G \cdot y_{IT} - 100 \cdot dy_{LST} \tag{R-25}$$

where y_{DT} and y_{IT} are quantity indices on which direct and indirect taxes are respectively applied, and S_{DT}^G and S_{IT}^G are their corresponding share in government real income. Since the government is financially independent, the last term, y_{LST}, represents real lump sum transfers to private households so that a non-distortionary instrument can be used to balance the government budget in a counterfactual.

2.3   Households behaviour

The separation of the government utility from the original regional welfare function means that households now face also their own budget-constrained utility maximization program. Contrary to government, households' utility accounts for both private consumption and saving. The reason for saving to be included in the utility function is to mimic household intertemporal behaviour within an atemporal maximization problem (Howe, 1975).

Similarly to the government behaviour, the stylized representation of the household's behaviour comprises the three below-described equations. The first equation is similar to the original equation and defines the relationship between the price of private consumption, p_C, and the market-price GDP deflator, p_{MP}, adjusted for the terms of trade effects, tot. This can be expressed in linearised percentage-change form by the following equation[1]:

$$p_C = p_{MP} - S_X \cdot tot \tag{R-7}$$

An improvement in the terms of trade reduces the unit cost of public expenditure (which includes import prices but not export prices) relative to the market-price of output (which includes export prices but not import prices).

As for the government, the consumption function for households relates now the value of private consumption to household income via the average propensity to consume. This equation takes the following linearised percentage-change form:

$$c = \gamma_C + (y_H + p_{MP}) - p_C \tag{R-8}$$

where c and y_H are the real private consumption and the real household income, respectively, and γ_C is the marginal propensity to consume for households.

Finally the value of household income must equal the value of factor endowments net of direct taxes. In real terms, this can be represented in the stylized model by the following equation in linearised percentage-change form:

$$y_H = S_{FC}^H \cdot y_{FC} - S_{DT}^H \cdot y_{DT} + 100 \cdot dy_{LST} \tag{R-25}$$

---

[1] The derivation of the equation comes from the linearised percentage-change form of the market-price GDP deflator from the expenditure side which can be written as follows:
$$p_{MP} = S_C \cdot p_C + S_G \cdot p_G + S_I \cdot p_I + (S_X \cdot p_X - S_M \cdot p_M)$$
and assuming that the prices of private consumption, government spending and investment move together ($p_C = p_G = p_I$) as well as assuming that the balance of trade is initially in equilibrium ($S_X = S_M$).

where y_{FC} is the real GDP at factor cost and S_{FC}^H and S_{DT}^H are shares in household real income of factor-cost real GDP and direct tax quantity index.

2.4   National income identity

The specification of two separate behaviours for households and government does not modify the original national income identity but allows understanding interactions between key players of the economy. Redefining Equation R-18 from a national perspective in nominal level terms lead to the following national income identity:

$$Y_{MP} = Y_{FC} + T_I \tag{L-1}$$

where Y_{MP} and Y_{FC} are gross national income, respectively, at market price and factor cost, and T_I is the value of indirect taxes. Gross national expenditure is the sum of all final demand components net of imports as well as the net income from abroad:

$$Y_{MP} = C + I + G + (X - M) + (Y_A - Y_L) \tag{L-2}$$

where C and G are private and public consumption, respectively, I investment spending, X and M are exports and imports, respectively, and Y_A and Y_L are income from foreign assets and servicing of foreign liabilities, respectively.

Household disposable income given by Equation R-24 may also be redefined in nominal level terms as follow:

$$Y_H = Y_{FC} - T_D \tag{L-3}$$

where T_D is the value of direct taxes. Households allocate their disposable income partly for consumption and partly for saving:

$$Y_H = C + S \tag{L-4}$$

where S represents national saving.

Since household income (Equation L-3) is equal to household expenditure (Equation L-4), gross national income at factor cost, Y_{FC}, can be substituted in the national income identity (Equation L-1), which may be rewritten using gross national expenditure (Equation L-2) as follows:

$$S - I = (G - T) + (X - M) + (Y_A - Y_L) \tag{L-5}$$

where T denotes the total amount of direct and indirect tax revenue. Thus the excess of saving over investment must equal the sum of the government budget deficit, the trade balance surplus and the net income from abroad. The last two terms form the current account surplus.

When there is a current account deficit in addition to the government budget deficit, domestic saving falls short of the sum of desired investment and the budget deficit. The current account deficit equals foreign saving that fills in the gap between domestic saving and the sum of investment and government budget deficit.

Table 1: Equation summary of the stylized model

	Closure type	Structural closure	Static SR closure	Static LR closure	Dynamic closure
	Exogenous variables	k, l $d\bar{t} = 0$	k, rw $d\bar{t} = 0$	$l, \psi_{I/K}$ $d\bar{t} = 0$	l, f_K $d\bar{t} = 1$
	Equations	**Endogenous variables for the specified closure**			
R-1	$k - l = \sigma_{\mathrm{KL}}(p_L - p_K)$	p_L	l	p_L	p_L
R-2	$p_K = ror - S_{\mathrm{X}} \cdot tot + S_{\mathrm{IT}} \cdot \bar{t}_{IT}$			ror	
R-3	$p_L = rw - S_{\mathrm{X}} \cdot tot + S_{\mathrm{IT}} \cdot \bar{t}_{IT}$	rw	p_L	rw	rw
R-4	$S_{\mathrm{K}} \cdot p_K = -S_{\mathrm{L}} \cdot p_L + \bar{a}$			p_K	
R-5	$p_{MP} = p_{FC} + S_{\mathrm{IT}} \cdot \bar{t}_{IT}$			p_{FC}	
R-6	$i - k = \psi_{I/K}$	$\psi_{I/K}$		k	$\psi_{I/K}$
R-7	$p_C = p_{MP} - S_{\mathrm{X}} \cdot tot$			p_C	
R-8	$c = \bar{\gamma}_{\mathrm{C}} + (y_{YH} + p_{MP}) - p_C$			c	
R-9	$p_G = p_C + \bar{f}_G$			p_G	
R-10	$g = \bar{\gamma}_{\mathrm{G}} + (y_{YG} + p_{MP}) - p_G$			g	
R-11	$rer = e + \bar{p}_W - p_{MP}$			rer	
R-12	$m = y_{MP} - \sigma_{\mathrm{M}} \cdot (rer - S_{\mathrm{IT}} \cdot \bar{t}_{IT})$			m	
R-13	$x = \bar{y}_W - \varepsilon_X \cdot rer$			x	
R-14	$tot = {x}/{\varepsilon_X} - \bar{p}_W + \bar{f}_X$			tot	
R-15	$y_{MP} = S_{\mathrm{C}} \cdot c + S_{\mathrm{G}} \cdot g + S_{\mathrm{I}} \cdot i + (S_{\mathrm{X}} \cdot x - S_{\mathrm{M}} \cdot m)$	e		p_{MP}	
R-16	$y_{FC} = S_{\mathrm{L}} \cdot l + S_{\mathrm{K}} \cdot k - \bar{a}$			y_{FC}	
R-17	$y_{MP} = S_{\mathrm{FC}}^{\mathrm{Y}} \cdot y_{FC} + S_{\mathrm{IT}}^{\mathrm{Y}} \cdot \bar{y}_{IT}$			y_{MP}	
R-18	$y_{MP} + p_{MP} = S_{\mathrm{FC}}^{\mathrm{Y}} \cdot y_{FC} + p_{FC} + S_{\mathrm{T}} \cdot (\bar{t}_{IT} + \bar{y}_{IT})$	p_{MP}		e	
R-19	$k = 100 \cdot \dfrac{I}{K} \cdot d\bar{t} + f_K$			f_K	k
R-20	$\begin{aligned} eror = &-\varepsilon_{\mathrm{ROR}} \cdot [k - 100 \cdot KGR \cdot d\bar{t}] \\ &-100 \cdot \kappa_{\mathrm{EROR}} \cdot \ln \dfrac{EROR}{ROR} \cdot d\bar{t} + \bar{f}_{EROR} \end{aligned}$			$eror$	
R-21	$d\_roregr = \kappa_{\mathrm{ROREGR}} \cdot [tror - eror]$			$tror$	
R-22	$d\_kgr = \kappa_{\mathrm{KGR}} \cdot \left[k + \dfrac{ror}{\varepsilon_{\mathrm{ROR}}} - 100 \cdot KGR \cdot d\bar{t}\right]$			d_kgr	
R-23	$d\_roregr = -\varepsilon_{\mathrm{ROR}} \cdot \dfrac{I}{K} \cdot [i - k] + \varepsilon_{\mathrm{ROR}} \cdot d\_kgr$			d_roregr	
R-24	$y_{YH} = S_{\mathrm{FC}}^{\mathrm{YH}} \cdot y_{FC} - S_{\mathrm{DT}}^{\mathrm{YH}} \cdot \bar{y}_{DT} + 100 \cdot d\bar{y}_{LST}$			y_{YH}	
R-25	$y_{YG} = S_{\mathrm{DT}}^{\mathrm{YG}} \cdot \bar{y}_{DT} + S_{\mathrm{IT}}^{\mathrm{YG}} \cdot \bar{y}_{IT} - 100 \cdot d\bar{y}_{LST}$			y_{YG}	
G-1	$tror_r = tror\_r$			i_r	
G-2	$i_r = f_{I,r} + \bar{f}_I\_r$			$f_{I,r}$	

Note that all variables (except $d\bar{t}$) in equations R-1 to R-25 are indexed by region.

This suggests that current account deficit and budget deficit are interrelated given planned investment and export demand, an increase in budget deficit associated with each possible level of real GNP is an expansionary influence on the economy because it increases aggregate purchases (desired expenditure). As real GNP increases, more import demand is generated in the economy. The increased import demand increases the current account deficit; however the expansionary influence of the budget deficit need net increase the current account deficit – it results in a sufficient increase in private saving or a fall in planned investment.

Given planned investment to the extent that the increase in the budget deficit does not result in a substantial increase in saving, the difference must be made up by an increase in the trade deficit. In effect, this means that increases in income in the economy lead to a trade deficit because consumers chose to spend a higher percentage of their earnings on imported goods instead of saving. If the government raise taxes to reduce budget deficit, the disposable income of the people will fall. This will reduce their spending on both domestic and imported goods. A fall in imports implies an improvement in trade balance.

An increase in taxes increases government spending. An increase in government spending due to budgetary surplus created by an increase in taxes will result in a fall in disposable income. This will lead to a fall in both consumption and saving. So the saving-investment balance will be altered. Alternatively stated, an increase in C and S is possible if disposable income rises. This is possible if the government reduces taxes.

3   Empirical Implementation

3.1   Calibration of the model

The model is calibrated to the GTAP 10 database pre-release 1 and uses the state of the world economy in 2014 as a starting point for our simulations.

The full database includes four years (2004, 2007, 2011 and 2014) and covers 141 countries/regions and 57 commodities/sectors, as well as eight endowments or primary factors. For the purpose of our study, primary factors are aggregated into land, natural resources, capital and two types of labour, unskilled and skilled labour. Table 2 reports countries and regions that are the main players with Trump administration. World GDP in 2014 is equal to US$78,226,114 million and the main countries and regions in terms of GDP account for approximately 72% per cent of world GDP (GWP).

Table 2: Size of the regions in terms of GDP (in 2014 at current prices)

Countries/Regions	GDP (US$ Million)	GDP Share (% of GWP)	Fiscal Deficit (US$ million)	Fiscal Deficit (% of GDP)
Australia	1,454,847	1.86%	42,351	2.91%
Canada	1,783,777	2.28%	8,955	0.50%
China	10,351,130	13.23%	93,781	0.91%
Japan	4,596,161	5.88%	283,675	6.17%
Mexico	1,297,848	1.66%	59,480	4.58%
UK	2,990,161	3.82%	167,210	5.59%

USA	17,348,073	22.18%	720,812	4.15%
Asian Tigers	2,538,905	3.25%	-18,719	-0.74%
Euro Zone	13,375,119	17.10%	345,524	2.58%
Rest of the World	22,490,093	28.75%	566,644	2.52%
World GDP	78,226,114	100.00%	2,269,713	2.90%

Source: GTAP 10 data base pre-release 1 (Based on WDI, World Bank).

In terms of sectoral aggregation, the study recognises ten sectors as reported by country/region in terms of gross value added in Table 3.

Table 3: Size of regional sectors in terms of gross value added (in 2014 at current prices)

Sectors	AUS	CAN	CHN	JPN	MEX	GBR	USA	ATG	EUR	ROW
Agriculture	32,431	31,807	896,095	47,027	39,953	24,166	186,018	38,419	200,059	1,739,570
Fossil Fuels	48,166	84,679	145,783	309	15,353	38,173	213,414	494	30,749	1,932,047
Mining	68,966	10,596	146,355	2,703	12,562	4,385	30,223	13,116	30,795	203,539
Food & Bev.	29,142	40,084	267,561	86,888	60,721	47,469	308,292	24,080	251,920	761,425
TCF[2]	4,365	7,989	273,549	16,088	12,041	15,761	114,516	27,602	95,414	315,450
Oth. Manuf.	100,196	200,778	2,229,115	597,514	195,861	307,150	2,218,557	559,784	1,746,035	2,540,710
Util. & Cons.	131,314	146,811	726,981	321,948	96,699	213,178	1,379,580	152,835	875,565	1,914,314
TTT[3]	249,986	293,489	1,315,673	930,462	268,624	497,512	2,914,395	516,164	2,254,001	4,075,653
FBGS[4]	542,828	652,597	2,388,925	1,693,204	368,934	1,231,242	7,491,023	822,567	5,447,465	5,809,750
Dwellings	105,670	101,695	348,481	426,153	116,731	236,720	1,246,100	112,928	700,019	877,267
Total	1,313,063	1,570,525	8,738,517	4,122,296	1,187,476	2,615,757	16,102,117	2,267,988	11,632,022	20,169,724

Source: GTAP 10 data base pre-release 1 (Based on WDI, World Bank).

In terms of behavioural data, the model relies primarily on three type of substitution/transformation elasticity parameters: the elasticity of substitution between primary factors in production, the elasticity of substitution in the Armington nesting structure, and the elasticity of transformation between sectors for sluggish primary factors. Values for these parameters are also based on the GTAP 9a database.

The foreign income payments and receipts shares in total income are used to determine the share of foreign and domestic ownership of regional capital stocks. This allocation of savings between domestic and foreign investment in the calibration of the model respects the observed home bias in equity portfolios (French & Poterba, 1991)[5]. In simulation, entropy theory is adopted to determine portfolio allocation ensuring that gross ownership positions remain positive.

---

[2] Textiles, clothing and footwear.
[3] Trade, transport and telecommunication.
[4] Financial, business and governmental services.
[5] Home bias is the empirical phenomenon that investors assign anomalously high weights to their own domestic assets. It is probably the most established empirical regularity in international portfolio allocation theory. Theories of asymmetric information dominate the potential explanations of why investors forego the benefits of international diversification. Reflected in both portfolio choice and superior performance of local

Specifically, it is assumed that the share of each regional household's wealth in domestic and foreign firms and the share of each region's capital stock owned by domestic and foreign residents stay as close as possible to their initial value subject to household's wealth constraint and firm value constraint (Ianchovichina & McDougall, 2012).

In addition we assume a unitary elasticity for the sensitivity of regional investment allocation across sectors. Values of the remaining parameters and coefficients for the dynamic equations are derived similarly to the dynamic GTAP model (McDougall, Walmsley, Golub, Ianchovichina, & Itakura, 2012).

3.2   Closure specification

Any calibration of a general equilibrium model starts with the specification of the set of naturally exogenous variables so that there are as many independent equations as endogenous variables left in the system. Naturally exogenous variables are normally not explained in a CGE model. These are usually observable variables such as tax rates and unobservable variables such as technology and preference variables.

Also aggregate investment is not explained in the model but is driven by aggregate savings, which means that, at the global level, investment adjusts to accommodate savings. In this setting the allocation of regional investment is determined at the global level and thus the level of investment in each region can be thought of as exogenous. The supply of labour in each region is exogenous, as it is primarily determined by demographic factors and technological change, as well as the arbitrary shift variable in capital stock.

For the purpose of this study, our global economic model is configured in a recursive-dynamic mode, which means that the model can be solved as a sequence of periodic solutions. As our interest lies only in biennial periods of time, we take advantage of the continuous time specification of the model formulation.

Our model is typically run with two different interval lengths. The first time period comprises three years and is intended to bring the 2014 base year database to the initial period of interest, which is the year 2017 in this study. The second length of time intervals involves two years and projects thus the global economy throughout the year 2035.

3.3   Development of a baseline

The development of a baseline builds upon the work from GTAP (Walmsley, Dimaranan , & McDougall, 2012). The macroeconomic variables in the database include projections for GDP, gross domestic investment, government and private consumption, imports and exports, skilled and unskilled labour, and population by age groups. These projected values were obtained for 226 countries starting in 2005 up to different end years depending on the type of data and on the data provider. As a starting point, only projections of GDP, labour force (skilled and unskilled labour) and population are drawn from this work to develop the baseline.

---

investors, geographic proximity is also a prominent explanation supported by a large body of empirical evidence.

Projections for capital stocks are endogenous to the model as they result from the accumulation of projected investment. Changes in endowments that don't explain changes in real GDP are attributed to technical changes in all primary factors except capital.

3.4 Baseline simulation results

[To be completed]

4 Analysis of Potential Trump's Policies

[To be completed]

4.1 Design of policy scenarios

[To be completed]

4.2 Modelling of potential economic policies

[To be completed]

4.3 Scenarios simulation results

[To be completed]

5 Concluding Remarks

[To be completed]

Bibliography

Cretegny, L. (2014). Sector-Specific Investment in a MRIO CGE Model. *17th Annual Conference on Global Economic Analysis.* Dakar, Senegal: Center for Global Trade Analysis.

Cretegny, L. (2015). A Dynamic Global CGE Model with a GVAR-based Baseline. *18th Annual Conference on Global Economic Analysis.* Melbourne, Australia: Center for Global Trade Analysis.

Dixon, P. B., Koopman, R. B., & Rimmer, M. T. (2013). The MONASH Style of Computable General Equilibrium Modeling: A Framework for Practical Policy Analysis. In P. B. Dixon, & D. Jorgenson, *Handbook of Computable General Equilibrium Modeling* (pp. 23-103). Elsevier B.V.

French, K. R., & Poterba, J. M. (1991, May). Investor Diversification And International Equity Markets. *American Economic Review, 81*(2), 222-226.

Harrison, J. W., & Pearson, K. R. (1996). Computing solutions for large general equilibrium models using GEMPACK. *Computational Economics, 9*(2), 83-127.

Hertel, T. W., & Tsigas, M. E. (1997). Structure of GTAP. In W. T. Hertel, *Global Trade Analysis: Modeling and Applications.* Cambridge University Press.

Howe, H. (1975, June). Development of the extended linear expenditure system from simple saving assumptions. *European Economic Review, 6*(3), 305-310.

Huff, K., McDougall, R., & Walmsley, T. (2000). *Contributing Input-Output Tables to the GTAP Data Base.* Center for Global Trade Analysis, GTAP Technical Paper No. 1. Purdue University.

Ianchovichina, E. I., & McDougall, R. A. (2012). Theoretical Structure of Dynamic GTAP. In E. I. Ianchovichina, & T. L. Walmsley (Eds.), *Dynamic Modeling and Applications for Global Economic Analysis* (pp. 13-70). New York: Cambridge University Press.

McDougall, R. A., Walmsley, T. L., Golub, A., Ianchovichina, E. I., & Itakura, K. (2012). An Overview of the Dynamic GTAP Data Base: The Data Base Construction and Aggregation Programs. In E. I. Ianchovichina, & T. L. Walmsley (Eds.), *Dynamic Modeling and Applications for Global Economic Analysis* (pp. 120-135). New York: Cambridge University Press.

Narayanan, B. G., Aguiar, A., & McDougall, R. (2015). *Global Trade, Assistance, and Production: The GTAP 9 Data Base.* Purdue University. Center for Global Trade Analysis.

Shoven, J. B., & Whalley, J. (1984, September). Applied General Equilibrium Models of Taxation and International Trade: An Introduction. *Journal of Economic Literature, XXII*, 1007-51.

Walmsley, T. L., Dimaranan , B. V., & McDougall, R. A. (2012). A Baseline Scenario for the Dynamic GTAP Model. In E. Ianchovichina, & T. L. Walmsley (Eds.), *Dynamic Modeling and Applications for Global Economic Analysis* (pp. 136-157). New York: Cambridge University Press.