WP1: Methodology Inventory

Ronald B. Davies (University College Dublin)

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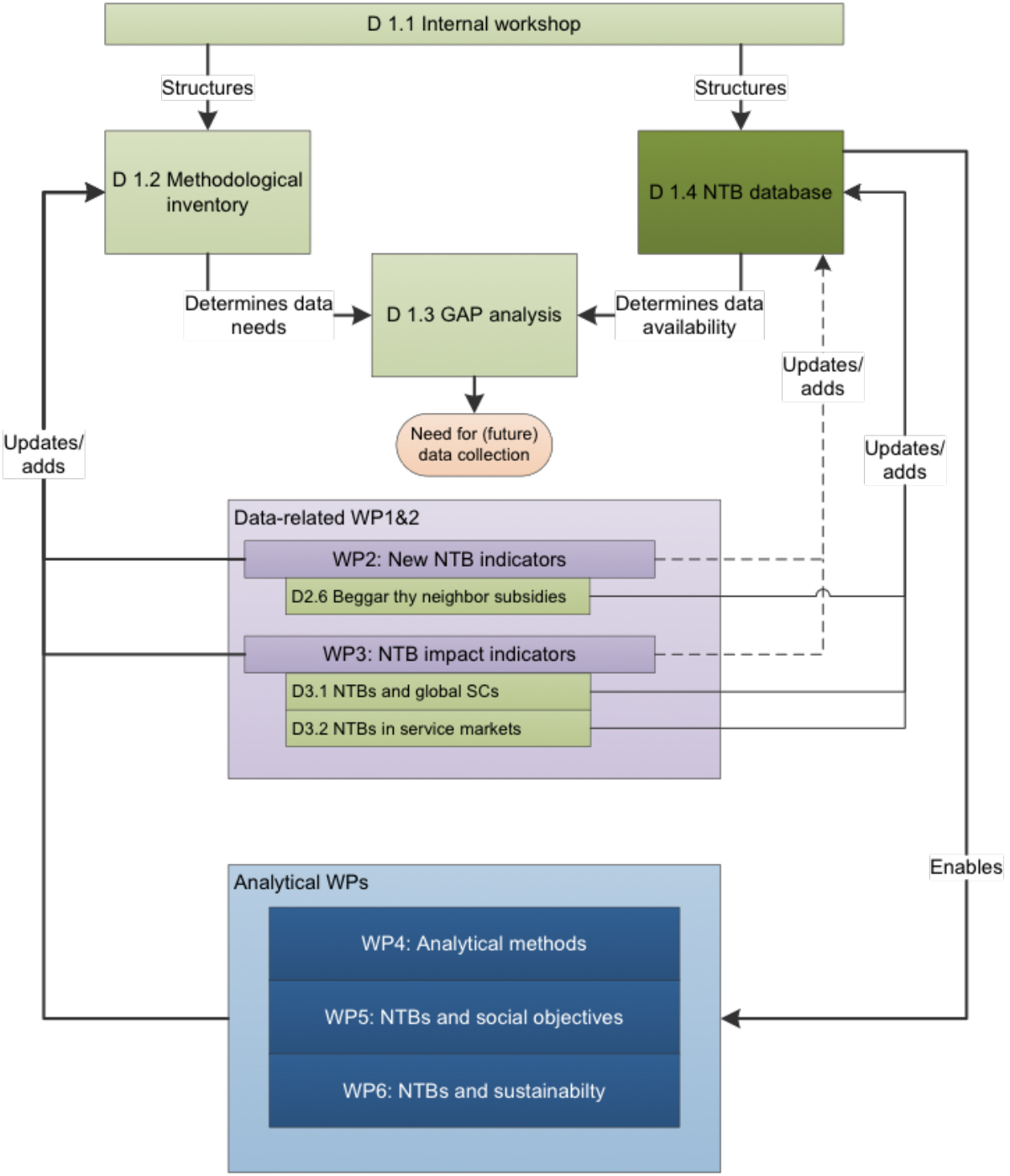

D 1.1 Internal workshop
Structures
Structures
D 1.2 Methodological inventory
D 1.4 NTB database
Determines data needs
D 1.3 GAP analysis
Determines data availability
Updates/ adds
Need for (future) data collection
Updates/ adds
Updates/ adds
Data-related WP1&2
WP2: New NTB indicators
D2.6 Beggar thy neighbor subsidies
WP3: NTB impact indicators
D3.1 NTBs and global SCs
D3.2 NTBs in service markets
Enables
Analytical WPs
WP4: Analytical methods
WP5: NTBs and social objectives
WP6: NTBs and sustainabilty

Methodology Inventory

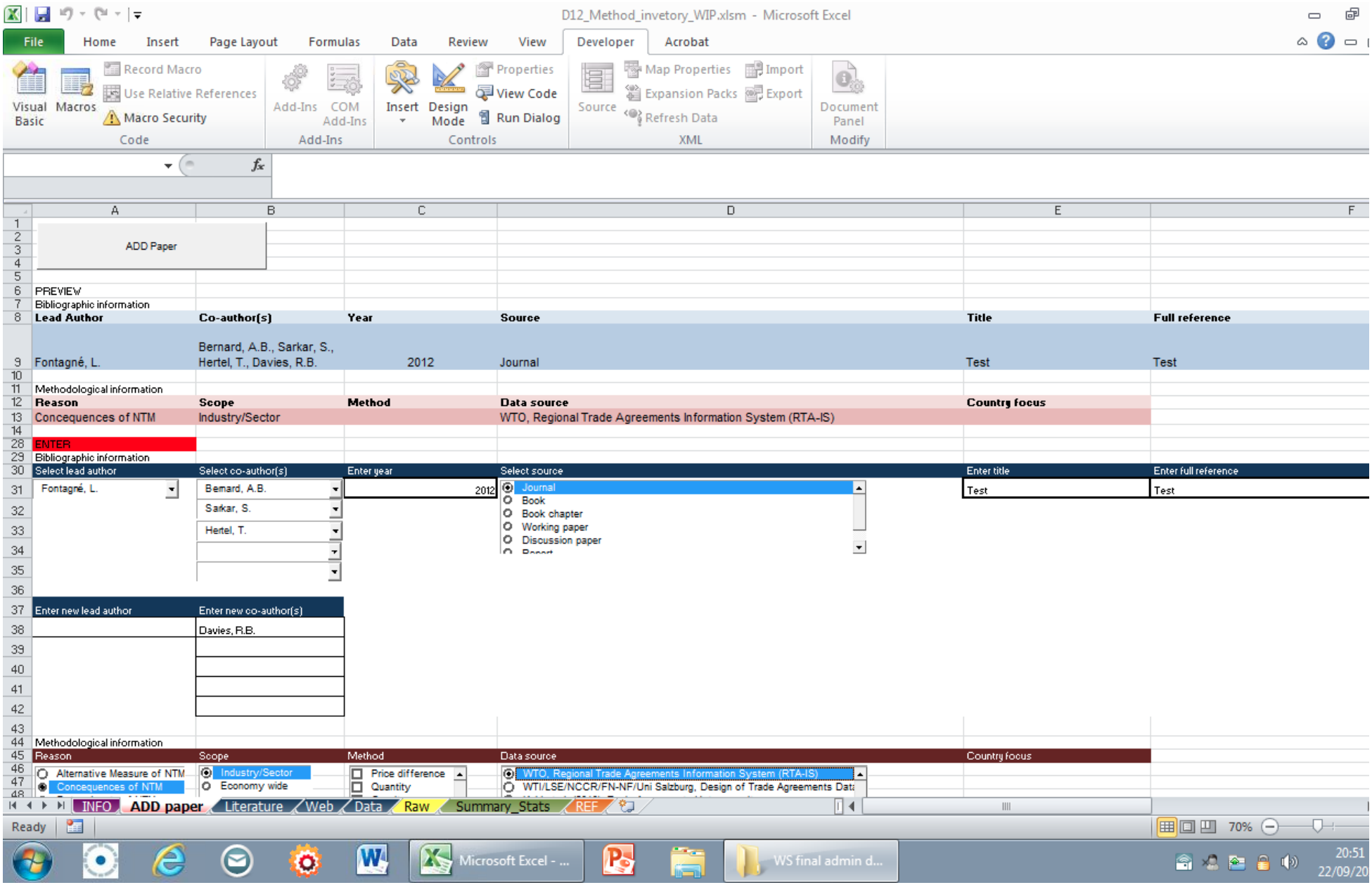
- The methodological inventory: *"develop an inventory of methodological approaches for NTM estimation and assessment. It will do so by surveying both the current state of the art academic literature and the efforts of various policy institutions..."*

$\Rightarrow$ Comprehensive overview of what is out there

$\Rightarrow$ A meta-analysis in terms of methods (of course), but also data used, as well as geographical scope (?)

$\Rightarrow$ A first step in linking methods to data, i.e. basis for the GAP analysis

$\Rightarrow$ A living doc that is updated in the course of PRONTO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Alternative Measure of NTM
Concequences of NTM
Industry/Sector
Economy wide
Price difference
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WTO, Regional Trade Agreements Information System (RTA-IS)
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Methodology Inventory

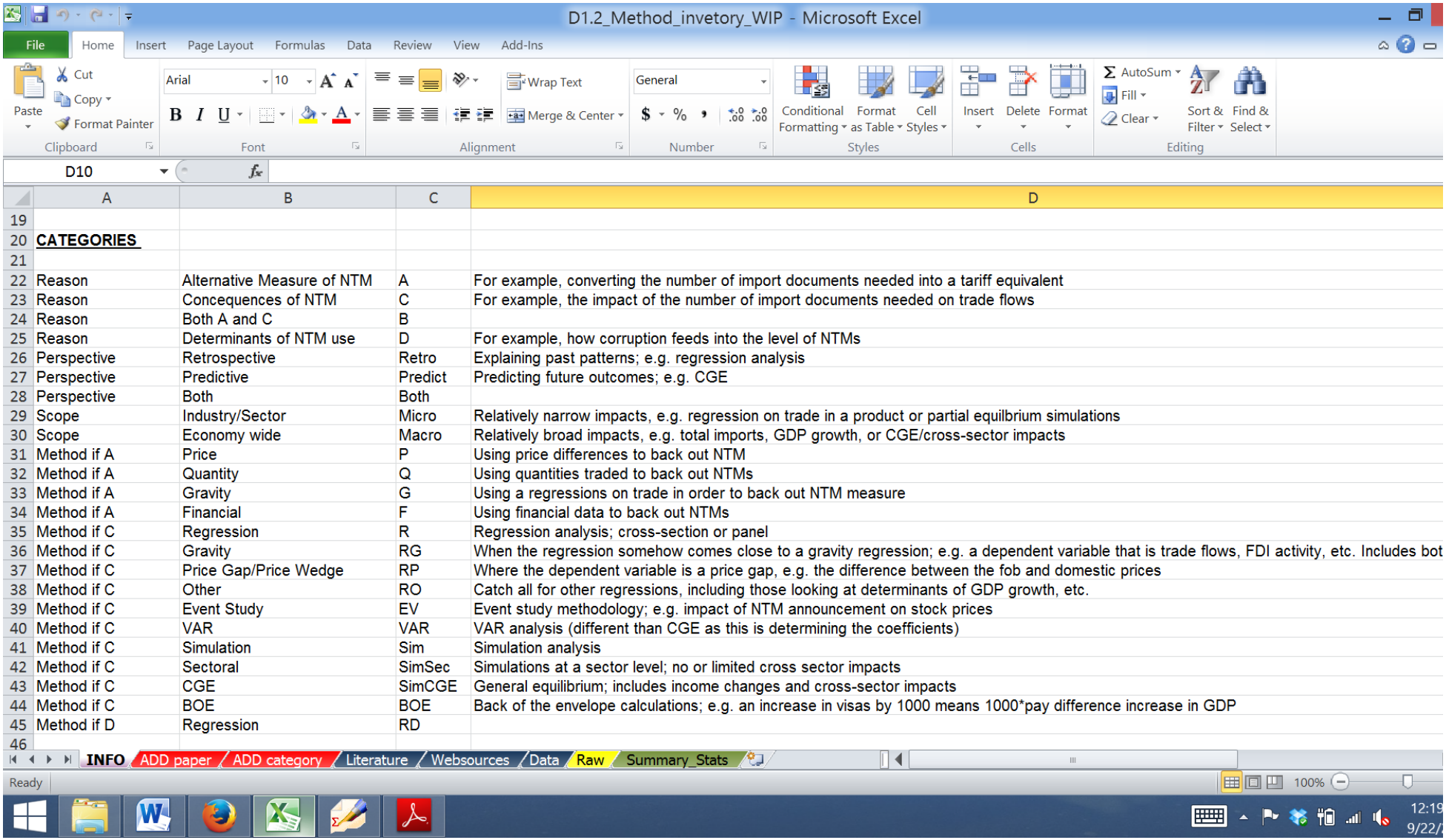
- In thinking about classifying *how* NTM measures are used:

$\Rightarrow$ Reason: what is the goal?

$\Rightarrow$ Perspective: looking backwards or forwards?

$\Rightarrow$ Scope: How wide is the net?

$\Rightarrow$ Method: in what way is the NTM measure used?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D10
A B C D
19
20 CATEGORIES
21
22 Reason Alternative Measure of NTM A For example, converting the number of import documents needed into a tariff equivalent
23 Reason Concequences of NTM C For example, the impact of the number of import documents needed on trade flows
24 Reason Both A and C B
25 Reason Determinants of NTM use D For example, how corruption feeds into the level of NTMs
26 Perspective Retrospective Retro Explaining past patterns; e.g. regression analysis
27 Perspective Predictive Predict Predicting future outcomes; e.g. CGE
28 Perspective Both Both
29 Scope Industry/Sector Micro Relatively narrow impacts, e.g. regression on trade in a product or partial equilbrium simulations
30 Scope Economy wide Macro Relatively broad impacts, e.g. total imports, GDP growth, or CGE/cross-sector impacts
31 Method if A Price P Using price differences to back out NTM
32 Method if A Quantity Q Using quantities traded to back out NTMs
33 Method if A Gravity G Using a regressions on trade in order to back out NTM measure
34 Method if A Financial F Using financial data to back out NTMs
35 Method if C Regression R Regression analysis; cross-section or panel
36 Method if C Gravity RG When the regression somehow comes close to a gravity regression; e.g. a dependent variable that is trade flows, FDI activity, etc. Includes bot
37 Method if C Price Gap/Price Wedge RP Where the dependent variable is a price gap, e.g. the difference between the fob and domestic prices
38 Method if C Other RO Catch all for other regressions, including those looking at determinants of GDP growth, etc.
39 Method if C Event Study EV Event study methodology; e.g. impact of NTM announcement on stock prices
40 Method if C VAR VAR VAR analysis (different than CGE as this is determining the coefficients)
41 Method if C Simulation Sim Simulation analysis
42 Method if C Sectoral SimSec Simulations at a sector level; no or limited cross sector impacts
43 Method if C CGE SimCGE General equilibrium; includes income changes and cross-sector impacts
44 Method if C BOE BOE Back of the envelope calculations; e.g. an increase in visas by 1000 means 1000*pay difference increase in GDP
45 Method if D Regression RD
46
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Purpose

- What is the reason that the study is using a NTM measure?

$\Rightarrow$ Alternative Measure of NTM (A): converting the number of import documents needed into a tariff equivalent

$\Rightarrow$ Concequences of NTM (B): the impact of the number of import documents needed on trade flows

$\Rightarrow$ Both: both A and C

$\Rightarrow$ Determinants of NTM use (D): how corruption feeds into the level of NTMs

- This informs a lot about the norms for how the measure is being used

Perspective

- Is the NTM measure being used to explain past data patterns or predict future outcomes?

$\Rightarrow$ Retrospective (Retro): regression analysis on impact of past liberalization

$\Rightarrow$ Predictive (Predict): CGE predictions of liberalization

$\Rightarrow$ Both (Both): both Retro and Predict

- This informs the norms as well as type of measure, e.g. CGE would probably need tariff-equivalent whereas regression could use 0/1

Scope

- How wide is the study's focus?

$\Rightarrow$ Industry/Sector (Micro): Narrow impacts, regression on trade in a product or partial eq. simulations

$\Rightarrow$ Economy wide (Macro): Broad impacts, total imports, GDP growth, or CGE/cross-sector impacts

- This is a bit of a judgement call, but cross-sector impacts would be more Macro

Methods

- Given the differing approaches under the different reasons, we break this down into:

$\Rightarrow$ Method if A (alternative measure)

$\Rightarrow$ Method if C (consequences)

$\Rightarrow$ Method if B (create alternative measure and estimate consequence)

$\Rightarrow$ Method if D (determinant of NTM)

Method if Alternative Measure Reason

- Method determined by the type of data used

$\Rightarrow$ Price (P): Using price differences to back out NTM
$\Rightarrow$ Quantity (Q): Using quantities traded to back out NTMs
$\Rightarrow$ Gravity (G): Using a regressions on trade in order to back out NTMs
$\Rightarrow$ Financial (F): Using financial data to back out NTMs

Method if Consequence Reason

- Largest set of different methodologies
- Three sub-categories

$\Rightarrow$ Regression (R): Regression analysis; cross-section or panel

$\Rightarrow$ Simulation (Sim): Simulation analysis

$\Rightarrow$ Back of the Envelope (BOE): Simple calculations; e.g. an increase in visas by 1000 means 1000*pay difference increase in GDP

Regression Methods if Consequence Reason

- Gravity (RG): When the regression is close to a gravity regression; e.g. a dependent variable that is trade flows, FDI, includes both extensive and intensive margins
- Price Gap/Price Wedge (RP):Where the dependent variable is a price gap, e.g. the difference between the fob and domestic prices
- Other (RO): Catch all for other regressions, including those looking at determinants of GDP growth, etc.
- Event Study (EV): Event study methodology; e.g. impact of NTM announcement on stock prices
- VAR (VAR): VAR analysis (different than CGE as this is determining the coefficients)

Simulation Methods if Consequence Reason

- Sectoral Simulation (SimSec): Simulations at a sector level; no or limited cross sector impacts
- CGE (SimCGE): General equilibrium; includes income changes and cross-sector impacts

Method if Determinant of NTM Reason

- Regression (RD): determinants of AD duties

Methodology Inventory

- Four fields of categorization:

$\Rightarrow$ Reason: what is the goal?
$\Rightarrow$ Perspective: looking backwards or forwards?
$\Rightarrow$ Scope: How wide is the net?
$\Rightarrow$ Method: in what way is the NTM measure used?

- Categories are *not* mutually exclusive
- This is intended to be a living classification