

#### **Dublin Trade Tour**



# Technology & Trade Symposium

Worshipful Company of World Traders
Friday, 15 June 2018
IDA, Wilton Park House, Dublin





## **Sponsored By**



The World Traders are extremely grateful to today's hosts:







#### Welcome



Alderman Professor Michael Mainelli
Master, Worshipful Company of World Traders
Executive Chairman, Z/Yen Group
International Member International Financial Services Strategy's
Industry Advisory Committee



## Agenda



08:45 for	09:15	Coffee
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09:15 Welcome

09:30 – 11:00 **Ireland's Economy** 

11:00 – 11:30 Coffee

11:30 – 13:00 Brexit & Ireland

13:00 – 14:00 Lunch

14:00 – 15:30 A World Of Opportunities

15:30 - 15:45 **Closing Remarks** 



## **Ireland's Economy**

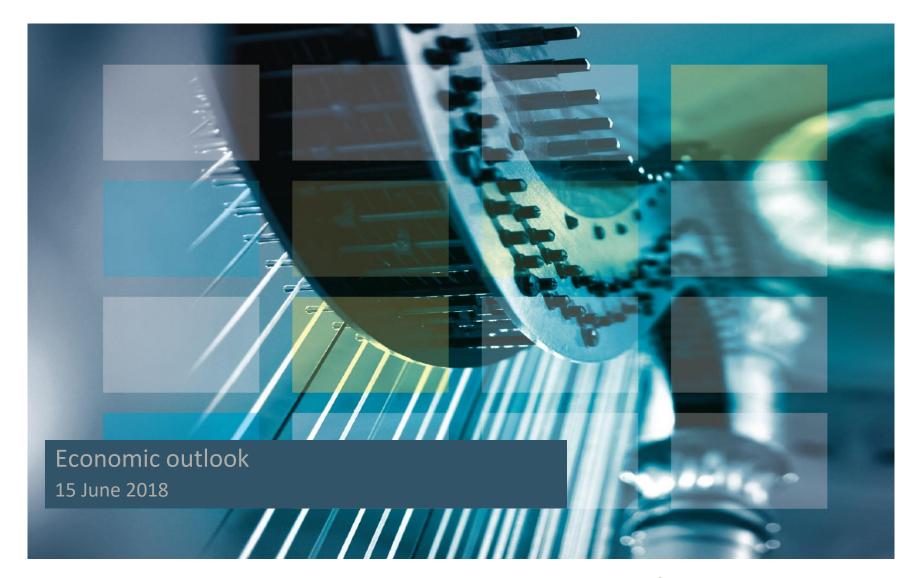


Patrick Young (Chairman)
Liveryman, Worshipful Company of World Traders
CEO Derivatives Vision

Pete Townsend Founder & CEO, Norio Ventures

Ian Power
Assistant Principal, Department of Finance

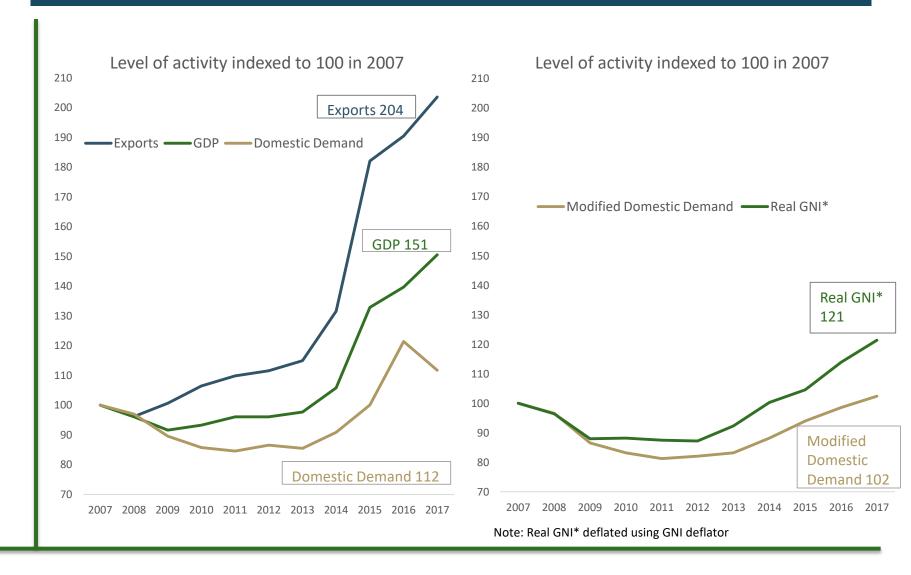
**PANEL** 





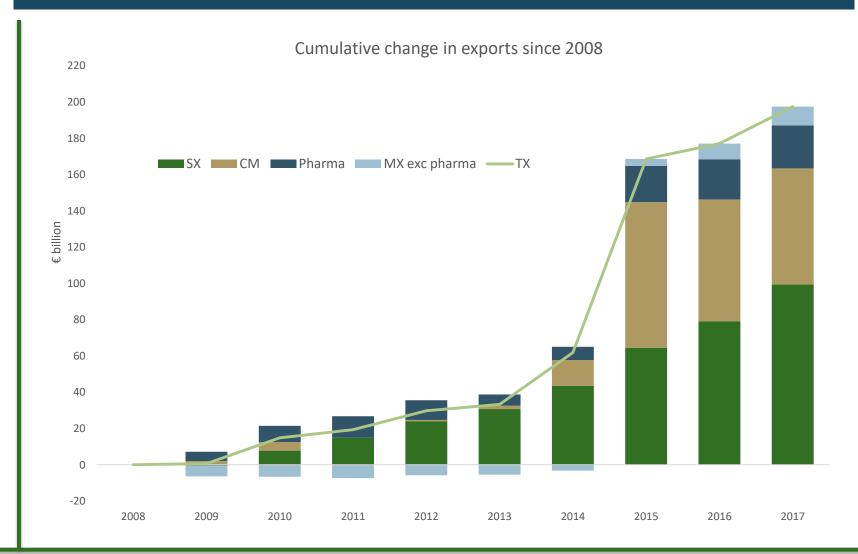


#### Recovery is entering a more mature stage...



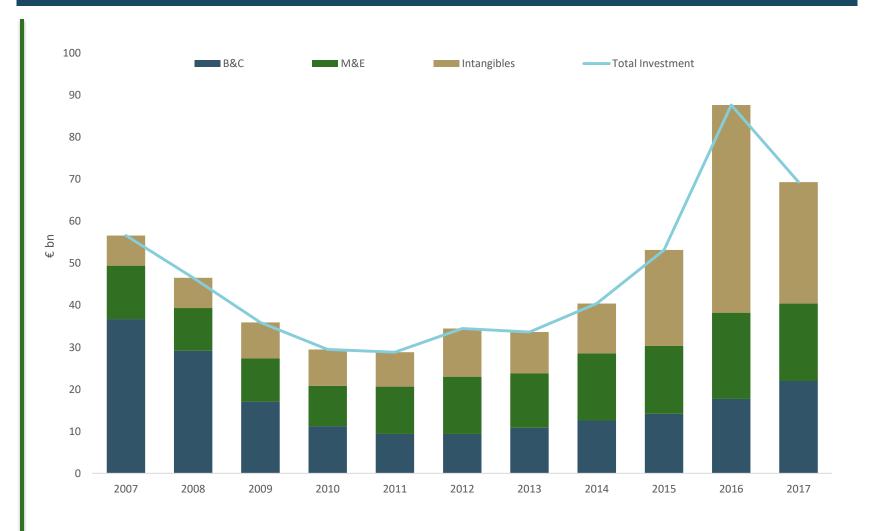


#### **Exports strong but "contract manufacturing" playing a role...**



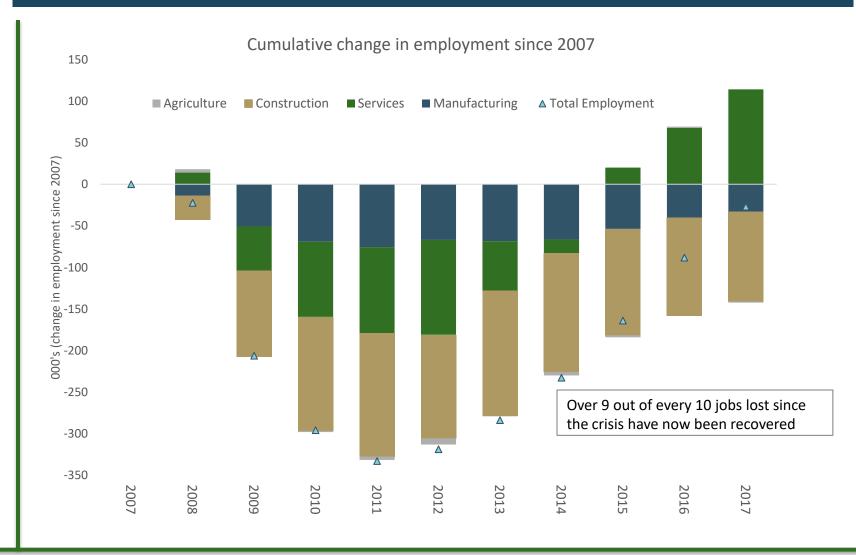


#### On-shoring of intangible assets distorting investment...





#### Growth yielding a dividend in the labour market...

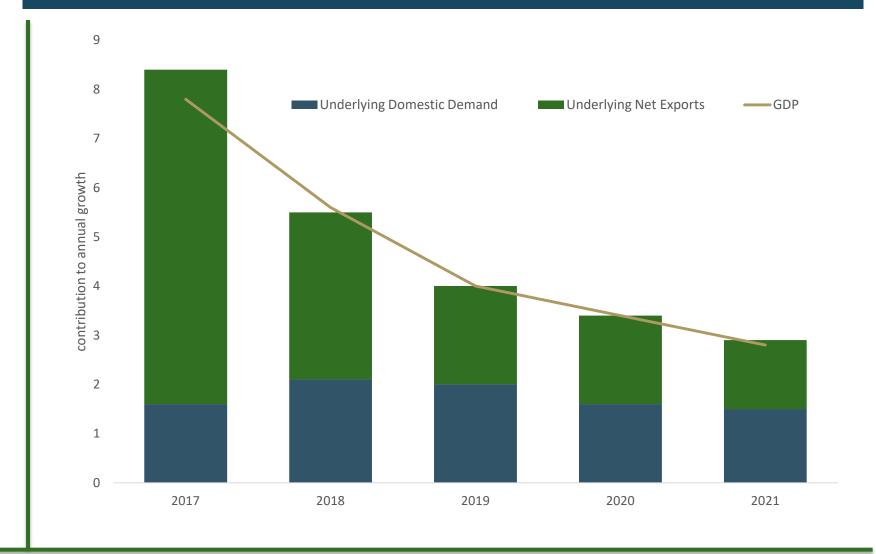




#### **SPU 2018 Macroeconomic Forecasts**

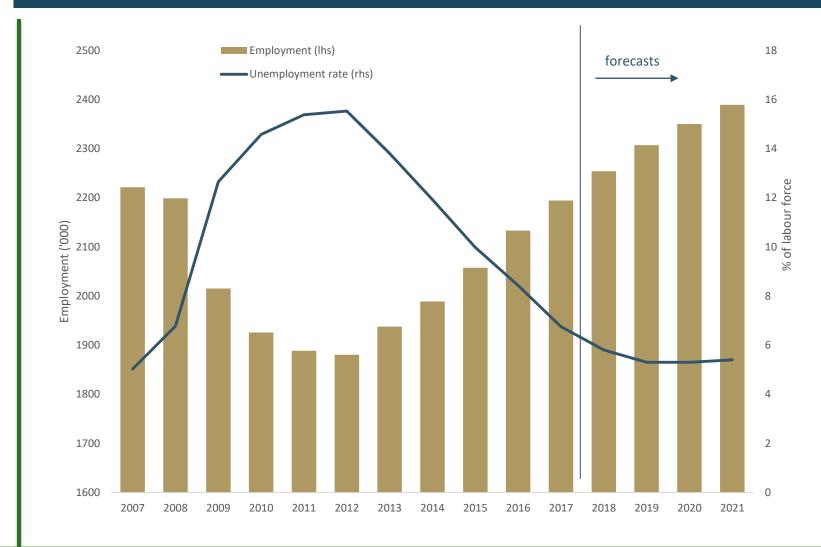


#### Baseline scenario is for strong GDP growth in the short-term...





#### **Employment set to exceed pre-crisis peak this year...**





#### Risks -tilted to the downside and mainly external in nature...

#### External

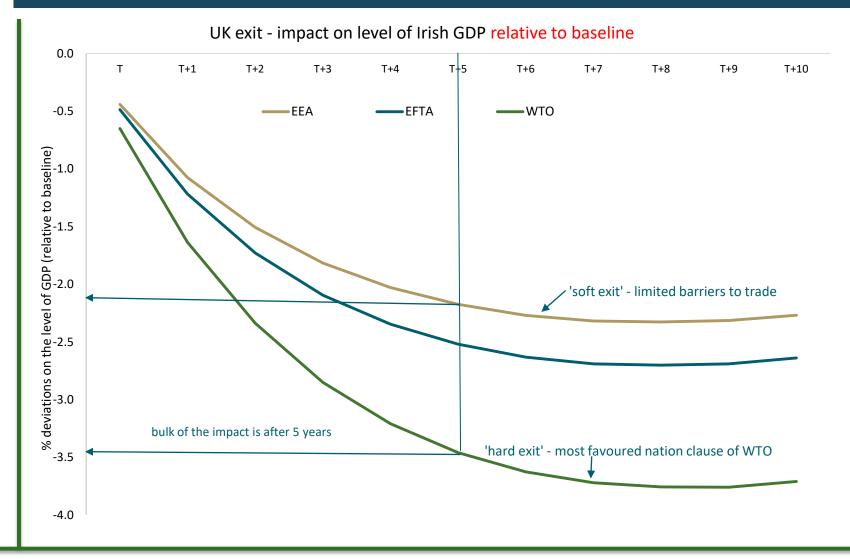
- Hard-Brexit
- Trade protectionism/trade-war
- Global financial market conditions (monetary policy normalisation)
- Geopolitical factors

#### **Domestic**

- Concentrated production base
- Overheating pressures
- Statistical distortions to national accounting aggregates



#### Medium-term "Brexit" impact could be severe...





#### Annex: Macroeconomic Outlook as set out in Stability Programme...

Year-on-year % change	2017	2018	2019	2020	2021
GDP	7.8	5.6	4.0	3.4	2.8
GNP	6.6	5.6	3.7	3.1	2.6
Nominal GDP	7.5	5.6	5.4	4.7	4.3
GNI* (€bn)	201.2	213.0	223.6	233.6	243.4
Personal Consumption	1.9	2.6	2.4	2.3	1.9
Govt Consumption	1.8	1.9	1.9	1.8	1.7
Investment	-22.3	8.5	7.4	5.2	4.7
Exports	6.9	6.9	5.4	4.5	3.9
Imports	-6.2	6.6	5.9	4.8	4.4
HICP	0.3	0.8	1.0	1.4	2.6
GDP Deflator	-0.3	0.0	1.3	1.3	1.5
Employment	2.9	2.7	2.3	1.9	1.7
Unemployment (rate)	6.7	5.8	5.3	5.3	5.4
Contributions to growth (p.p)*					
Domestic Demand	-6.2	3.0	2.8	2.3	2.0
Change in Stocks	0.1	0.0	0.0	0.0	0.0
Net Exports	14.5	2.5	1.2	1.1	0.8



## **Ireland's Economy**



#### **PANEL**

Patrick Young (Chairman)
Liveryman, Worshipful Company of World Traders
CEO Derivatives Vision

Pete Townsend Founder & CEO, Norio Ventures

Ian Power
Assistant Principal, Department of Finance

Martin Murray
Executive Director, Asia Matters



### **Coffee Break**



# Please be back in your seats by 11:30





#### **Brexit & Ireland**



## Robert Woodthorpe Browne MBE (Chairman) Immediate Past Master, Worshipful Company of World Traders CEO CIX

Lesley Batchelor OBE
Liveryman, Worshipful Company of World Traders
Director General, The Institute of Export

John Greer
Director of Economic Development, Belfast City Council

**PANEL** 

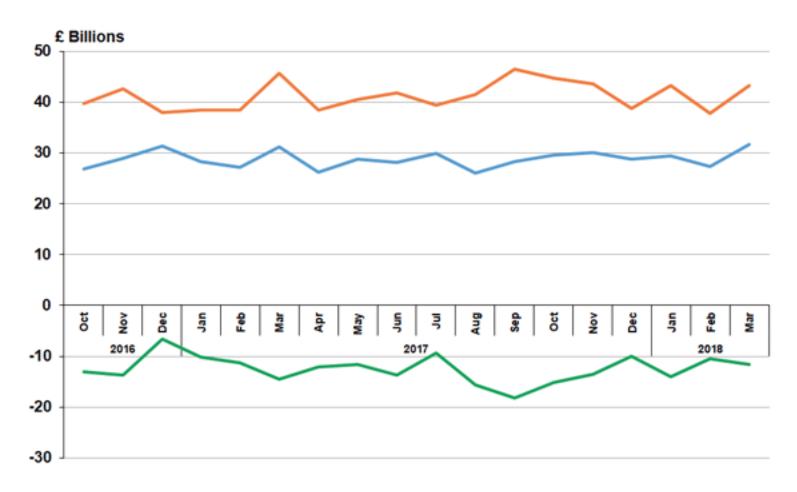


## State of UK Trade

Lesley Batchelor OBE
Director General

The Institute of Export & International Trade

In March 2018 the value of exports (EU and Non-EU) increased to £31.7 billion, and imports (EU and Non-EU) increased to £43.3 billion, compared with last month. Consequently the UK is a net importer this month, with imports exceeding exports by £11.6 billion.



Source: HM Revenue & Customs Overseas Trade in Goods Statistics

Note: 2017 and 2018 data is provisional

-Total Imports -Total Exports -Trade Gap

## Top trading partners

Rank	Country of Destination	Country Code	March 2018	Year to date 2018	Year to date 2017	% Change 2018/ 2017	% Share 2018 YtD
1	UNITED STATES	US	4,511	12,269	11,714	4.8	14.0
2	GERMANY	DE	3,191	9,248	9,561	-3.3	10.5
3	NETHERLANDS	NL	1,972	6,179	5,212	18.6	7.0
4	FRANCE	FR	2,137	6,117	5,889	3.9	7.0
5	IRISH REPUBLIC	IE	1,719	4,905	4,303	14.0	5.6
6	CHINA	CN	1,622	3,914	4,197	-6.7	4.5
7	BELGIUM	BE	1,203	3,372	3,340	1.0	3.8
8	SWITZERLAND	СН	1,603	3,287	5,782	-43.1	3.8
9	ITALY	IT	933	2,805	2,673	4.9	3.2
10	SPAIN	ES	921	2,688	2,760	-2.6	3.1

**Source:** HM Revenue and Customs, Overseas Trade Statistics – March 2018

Top exports by Tariff Chapter

	Product Description	March 2018	2018	2017
1	Nuclear reactors, boilers, machinery and mechanical appliances; parts thereof	4,639	13,155	12,390
2	Vehicles other than railway or tramway rolling-stock, and parts and accessories thereof	3,868	11,145	10,818
3	Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal, and articles thereof; imitation jewellery; coin	3,096	7,433	7,989
4	Mineral fuels, mineral oils and products of their distillation; bituminous substances; mineral waxes	2,272	6,840	6,649
5	Pharmaceutical products	2,083	6,193	6,680
6	Electrical machinery and equipment and parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	1,860	5,178	5,467
7	Aircraft, spacecraft, and parts thereof	1,542	4,325	4,463
8	Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; parts and accessories thereof	1,245	3,457	3,368
9	Organic chemicals	885	2,438	2,201
10	Plastics and plastic products	827	2,406	2,280
11	Beverages, spirits and vinegar	608	1,628	1,558
12	Other products	581	1,608	1,359
	Iron and steel	490	1,430	1,379
	Works of art, collectors' pieces and antiques	587	1,425	1,136
15	Miscellaneous chemical products	485	1,348	1,289
	Essential oils and resinoids; perfumery, cosmetic or toilet preparations	391	1,104	1,026
17	Articles of iron or steel	364	1,017	982
18	Articles of apparel and clothing accessories, not knitted or crocheted	301	888	897
19	Furniture; medical and surgical furniture; bedding, mattresses, mattress supports, cushions and similar stuffed furnishings; lamps and lighting fittings, not elsewhere specified; illuminated signs, illuminatedname-plates and the like; prefabricated buildings	269	742	768
20	Tanning or dyeing extracts; tannins and their derivatives; dyes, pigments and other colouring matter;paints and varnishes; putty and other mastics; inks	237	693	682

**Source:** HM Revenue and Customs, Overseas Trade Statistics – March 2018



#### TOP EXPORT DESTINATIONS







hina





50% of the top 20 export destinations for SMEs are in the EU.



More than two-thirds (67%) of those with FX requirements say they have been adversely impacted by currency volatility in the past year.



SMEs negatively impacted by currency volatility estimate an average financial disadvantage of £69,669 in the past 12 months.



Almost a quarter of \$ (23%) say they have reviewed their fore exchange requirement

#### TOP THREE CHALLENGES FACED BY EXPORTERS



Managing currency fluctuations



Logistics

Paperwork / administration



Managing currency fluctuations



TOP THREE CHALLENGES

FACED BY IMPORTERS

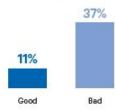


Managing duty, VAT and freight payments

uty, Logistic ght

#### BREXIT IMPACT TO DATE:





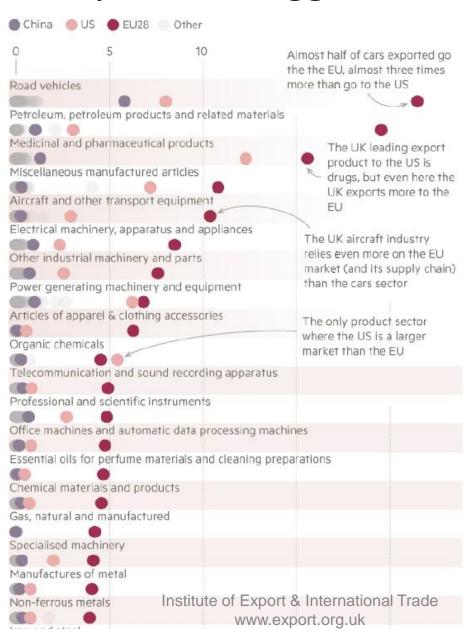






too early to tell

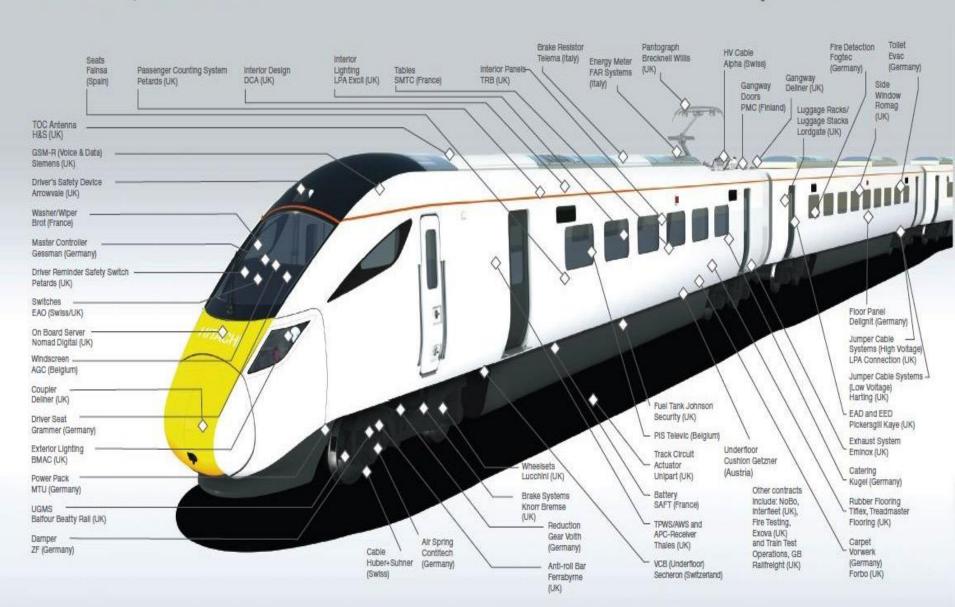
### The EU is by Far the Biggest Market for the UK



Source: Untad, FT)

## European suppliers selected for the Class 800/801 trains

### HITACHI Inspire the Next



#### Airbus' European footprint STADE FILTON Aft Fuselage Upper and Wing – development Lower Shells - manufacturing · Landing Gear - development and testing Wing Upper Cover – · Fuel Systems - development and testing manufacturing Vertical Tail Plane – assembly BROUGHTON and equipping Vertical Tail Plane – testing · Wing Box - assembly and pre-equipping **HAMBURG** SAINT-NAZAIRE Cabin and Fuselage – development Nose and Centre Aft Fuselage – assembly and Fuselage -assembly equipping and equipping Forward Fuselage – equipping Nose and Centre Fuselage - testing · Cabin and Fuselage - testing Customer Definition Centre **NANTES** BREMEN · Centre Wing Box, Keel Beam, Radome and Air · Cargo Loading Systems -Inlet - manufacturing development · Centre Wing Box, Keel Wing Movable Surfaces – Beam, Radome and Air development and testing Inlet - assembly Flaps – assembly Wing – equipping **GETAFE** Horizontal Tail Plane – LEGEND SAINT-ELOI assembly and equipping Development/ • S19 - assembly Testing · Pylon, Air Inlet and Nacelle Integration - development Manufacturing TOULOUSE Pylon and Aft Pylon Fairing Assembly/ **ILLESCAS** Aircraft Development - manufacturing Equipping · Pylon and Aft Pylon Fairing Structure and Customer Wing Lower Cover – Systems - testing - assembly and integration Delivery manufacturing and **PUERTO REAL** Final Assembly sub-assembly S19 Full Barrel Skin – Flight Test

Customer Delivery

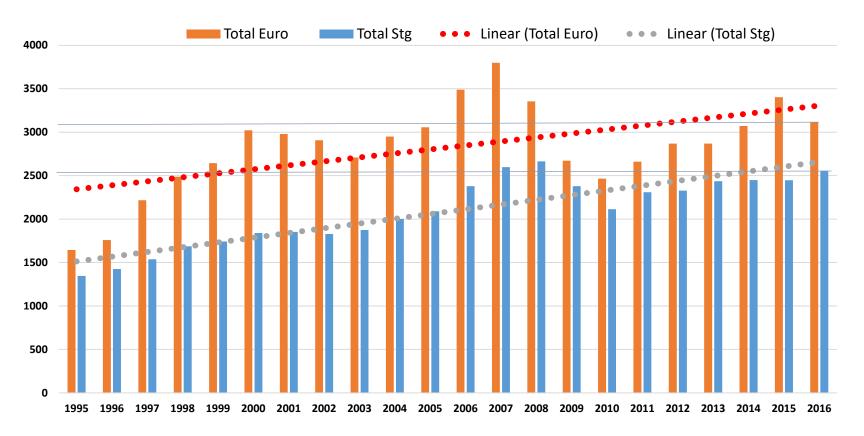
Horizontal Tail Plane

Boxes - assembly

manufacturing

Source: Airbus UK

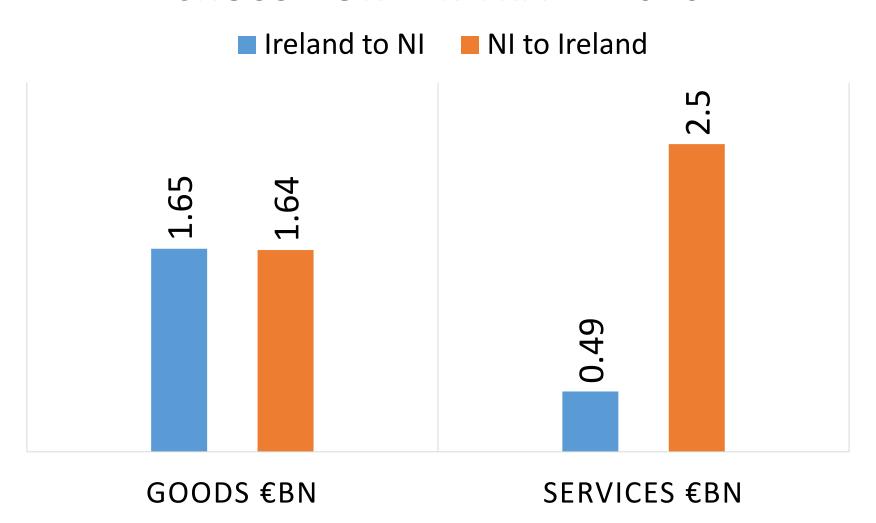
## Total Cross Border Trade in Goods 2016 (Millions)



- There has been on average a 4% year-on-year growth on cross border trade in goods over the 20 years
- 2016 is comparable with the rate of cross-border trade pre-recession peak

#### Source

#### **CROSS BORDER TRADE 2016**

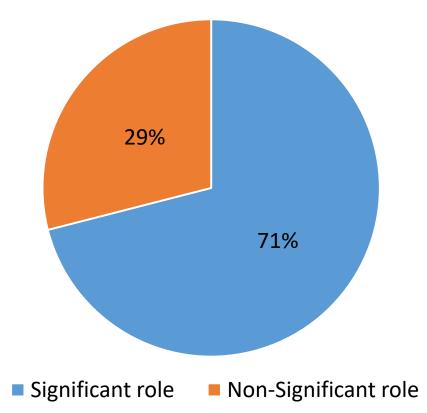


Euro to Stg €0.82, Stg to Euro £1.22

## **Source Kerry Curran,** Policy Research Manager – InterTradeIreland IOEIT Belfast Summit

## Opportunities for Growth

Role of cross-border market as a stepping stone to further markets (% of firms)



## The burden of Brexit will be borne by the sector – tariffs, NTBs, regulation.

Top 5 Concerns



#### Source

Stephen Kelly - Chief Executive - Manufacturing NI IOEIT Belfast Summit

#### Customs concerns – our future relationship

HMRC are working hard behind the scenes and also making headlines – as you would mentioning £20billion costs and Brexit in the same breath.

Key points from the appearance of Jon Thompson (CEO, HMRC) at the Treasury select Committee

- 1. There will be a functioning, but "less than optimal" UK Customs border by January 2021
- 2. Depending on the outcome of UK-EU negotiations; it will take 3 -5 years to fully develop Customs systems.
- 3. General stakeholder consensus is that they not act (spend money on development of systems) until there is more certainty and clarity.
- 4. HMRC is **recruiting 5000 additional staff** to cope with Brexit. 1100 are already in place working on policy, operations and IT.



- 5. 39 projects have been put on hold or slowed as a result of HMRC re-prioritising their workload in favour of Brexit...
- 6. Non Disclosure Agreements have been signed by a number of stakeholders to allow detailed **technical** discussions on Customs systems to allow HMRC to better understand stakeholder requirements and operations.
- 7. **Specific issues with some ports**. Fast parcel sector operations have been discussed in detail to further understand and support the UK consumer demand for e-commerce

#### Customs concerns – our future relationship

#### **Highly Streamlined Customs £17 – 20 billion** per year

This model envisages Customs entries which drives a high cost to business.. It assumes business will incur costs of around £32.50 per Customs entry. Adding in the cost of complying with origin requirements results in total additional cost to business of £17 – 20 billion annually.

#### **New Customs Partnership**

This model envisages free flow of goods across the border without Customs entries. The dual tariff system could be in place by January 2021 however the system to reclaim the difference between tariffs would not be ready by this time. Costs will be £700m but will be net neutral if tariff differences are reclaimed by businesses.





#### **Brexit & Ireland**



#### **PANEL**

Robert Woodthorpe Browne MBE (Chairman)
Immediate Past Master, Worshipful Company of World Traders
CEO CIX

Lesley Batchelor OBE
Liveryman, Worshipful Company of World Traders
Director General, The Institute of Export

John Greer
Director of Economic Development, Belfast City Council

Sarah Goddard
Secretary General, AMICE
Association of Mutual Insurers and Insurance Cooperatives in
Europe



### **LUNCH**



# Please be back in your seats by 14:00





## **A World Of Opportunities**



Loukas Spiliotopoulos CMgr MCMI (Chairman)
Honorary Treasurer, Worshipful Company of World Traders
Lancaster Private Equity

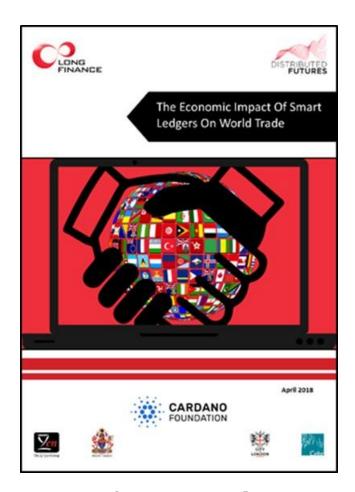
Alderman Professor Michael Mainelli Master, Worshipful Company of World Traders

**PANEL** 



# **World Of Opportunities**





Alderman Professor Michael Mainelli Executive Chairman, Z/Yen Group



### **Terminology Evolving**



- ♦ ledger a record of transactions
- distributed divided among several or many, in multiple locations
- mutual shared in common, or owned by a community
- mutual distributed ledger (MDL) a record of transactions shared in common and stored in multiple locations
- mutual distributed ledger technology a technology that provides an immutable record of transactions shared in common and stored in multiple locations
- blockchain "a transaction database shared by all nodes participating in a system based on the Bitcoin protocol"
- ♦ smart ledger MDL with embedded, executable code



# **Smart Ledgers Hold Immense Promise**



Area	Possible Applications				
Financial	Currency, private and public equities, certificates of deposit, bonds, derivatives,				
instruments,	insurance policies, voting rights associated with financial instruments, commodities,				
records, models	derivatives, trading records, credit data, collateral management, client monies				
	segregation, mortgage or loan records, crowd-funding, P2P lending, microfinance,				
	(micro)charity donations, account portability, airmiles & corporate tokens, etc.				
Public records	Land and property titles, vehicle registries, shipping registries, satellite registries,				
	business license, business ownership/incorporation/dissolution records, regulatory				
	records, criminal records, passport, birth/death certificates, voting ID, health and				
	safety inspections, tax returns, building and other types of permits, court records,				
	government/listed companies/civil society, accounts and annual reports, etc.				
Private records   Contracts, ID, signature, will, trust, escrow, any other type of classifi					
	data (e.g. physical details, date of birth, taste) etc.				
Semi-	High school/university degrees and professional qualifications, grades, certifications,				
private/semi-	human resources records, medical records, accounting records, business transaction				
public records	s records, locational data, delivery records, genome and DNA, arbitration, ger				
	trees, clinical trials, etc.				
Physical keys	Key to home, hotel, office, car, locker, deposit box, mail box, Internet of Things, etc.				
Intellectual	Copyrights, licenses, patents, digital rights management of music, rights management				
property of intellectual property such as patents or trademarks, proof of au					
	authorship, etc.				
Other records	Cultural, historical events, documentary (e.g. video, photos, audio), (big) data				
	(weather, temperatures, traffic), SIM cards, archives, geostamping, etc.				



## **Generic Smart Ledger Apps**







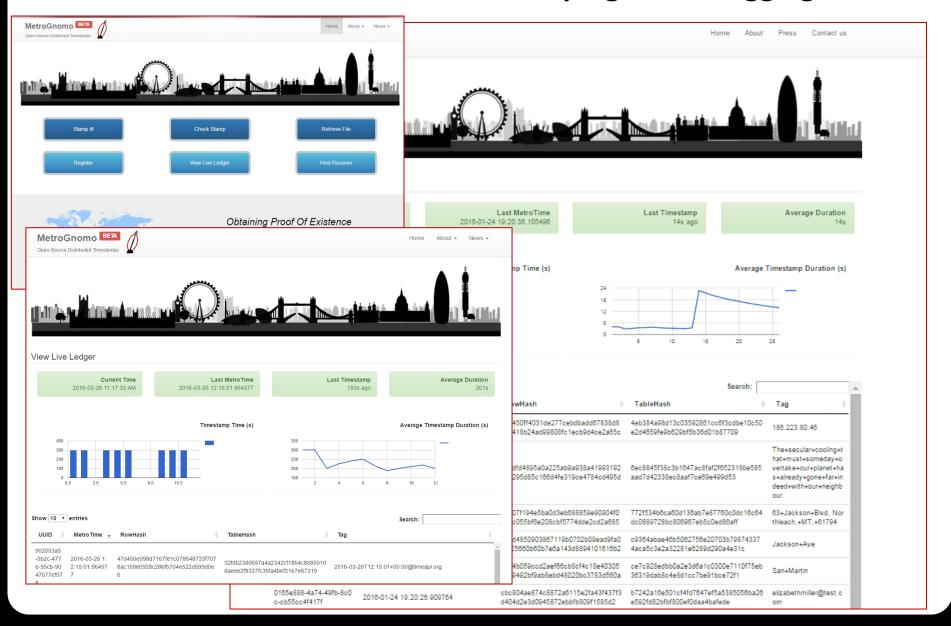
**Process Change Difficulty** 



### **Application:**



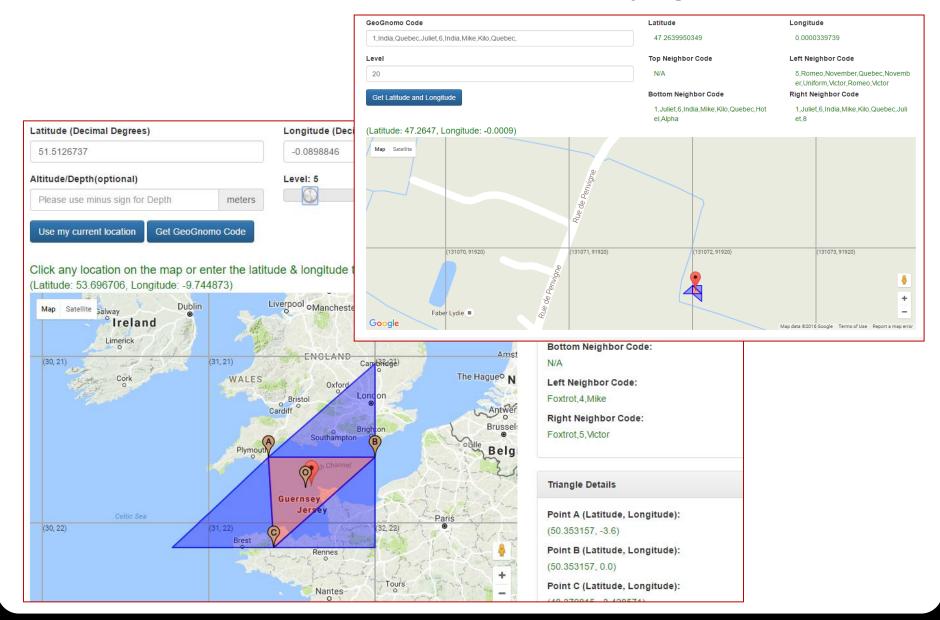
### **MetroGnomo – Timestamping & Datalogging**





### Application: GeoGnomo – Geostamping

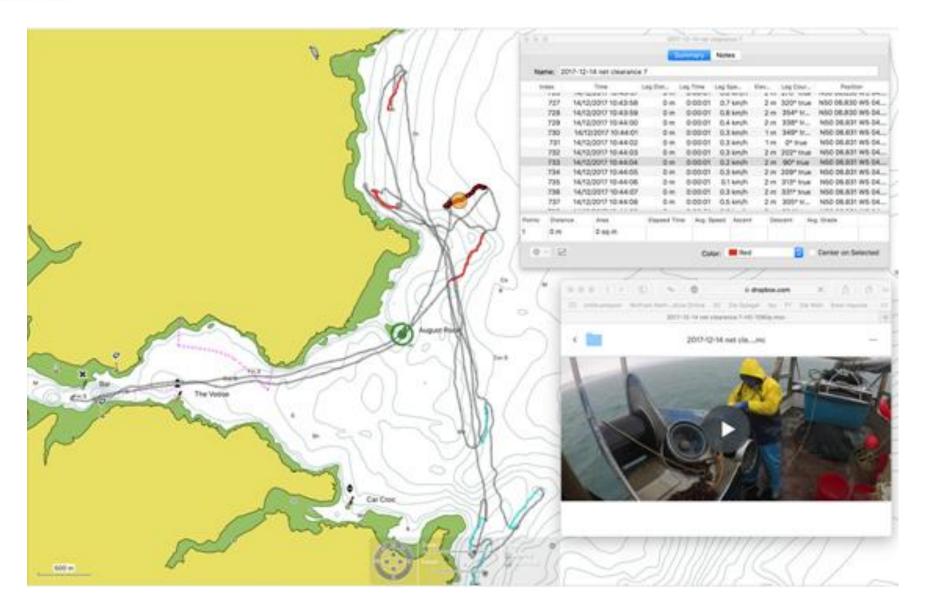






# Application: Fishface

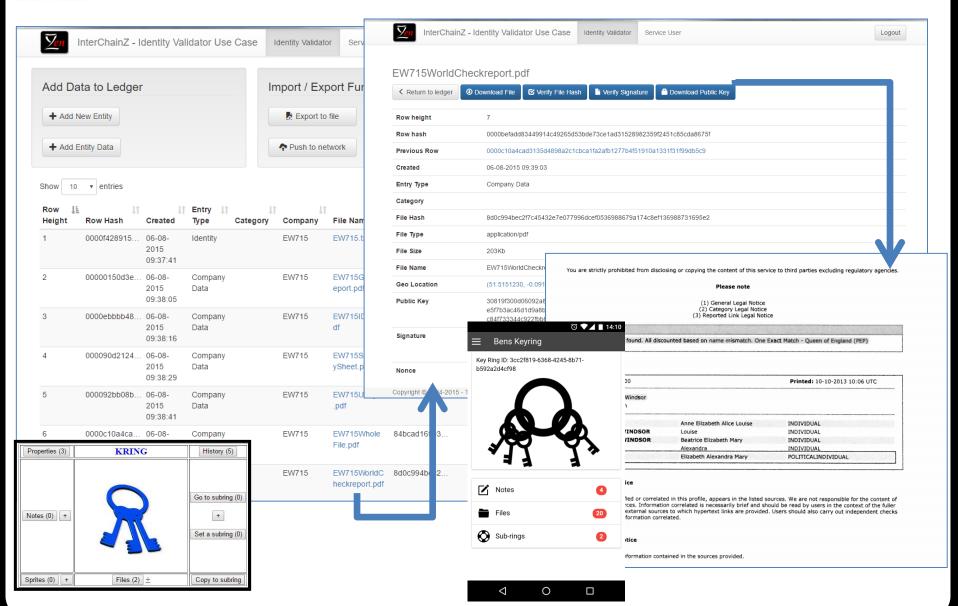






### **IDchainZ**







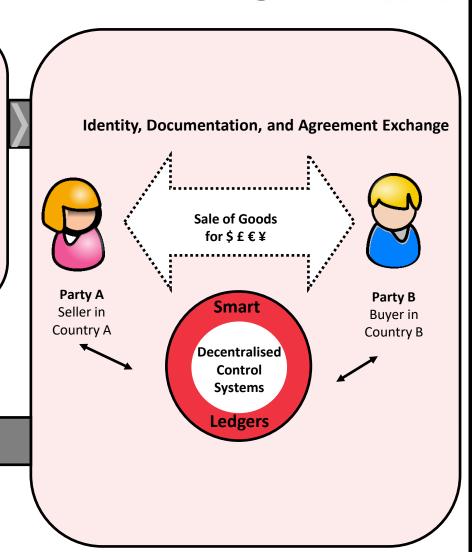
# **Background On Smart Ledgers**



- Smart Ledgers are mutual distributed ledgers (MDLs, aka blockchains) with embedded, executable code.
- MDLs are multi-organisational databases with a super-audit trail that rely on cryptography to ensure their functionality and integrity, as well as to control viewing permissions.
- Smart Ledgers are able to specify rules about the use of data within the MDL, for example "release this ship's location four hours after it has been recorded on the MDL."
- International trade is an area where Smart Ledger technology could have tangible, practical applications.

#### **Smart Ledger Proposition**

- ◆ Automated solutions relying on collaborative platforms
- **♦** Fewer information asymmetries
- ◆ Better control over central third parties
- ◆Identity, documentation, and agreement exchange
  - \*Identity validation
  - \*Documentation & consolidation of trade information
  - \*Agreement exchange & payment clearing
  - \*Provenance security/integrity of supply chain





# **Trade System**





A platform that instantly connects buyers and sellers with service providers who offer ondemand financing, insurance, and logistics.





### **Global Trade In Context**



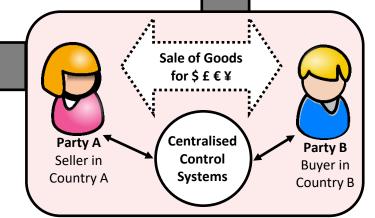
- International trade facilitates wealth and prosperity.
- An effective global trading system allows goods and services to flow to where they are needed most, through price signalling.
- In turn, trade generates value through economies of scale and specialisation.
- International trade allows countries to exploit economies of scale by producing for a bigger mass market than would be achievable domestically. Global trade has fallen from around \$18tn in 2014 to approx. \$15tn in 2016

#### **Barriers**

- ◆ Direct Barriers
- \*Tariffs
- \*Embargos
- ◆Indirect (Non-Tariff) Barriers
- \*Quotas
- \*Domestic subsidies
- \*Customs delays
- \*Varying degrees of development
- \*Cultural & linguistic differences

#### **Potential Problems**

- ◆ Data flows liable to leaks & breaches
- **♦ Lack of control**
- **♦ Need for data repositories**
- **◆ Centralised checking/verification services**
- ◆Agent action/adaptation constraints





# **Limited Scope**

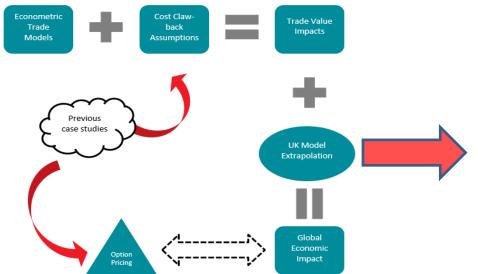




Smart Ledger	Reduce	Enhance	<b>Increase Certainty</b>
<b>Application Area</b>	Risks	Rewards	(reduce volatility)
Identity			
Documentation			
Agreements			
Payments			
Transactions			

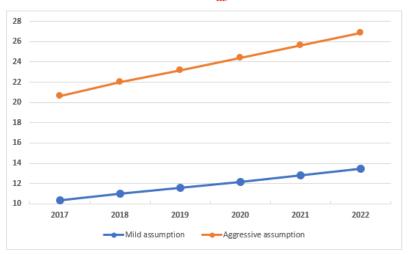


# Results: \$35-\$140bn Uplift In Tradeland



	Global USD GDP Uplift	Current Global GDP (USD bn)	Potential global labour market impact
Low scenario High scenario	10.33	79,281	449,319
	20.66	79,281	898,639

Forward projection of global economic impacts (USD bn)



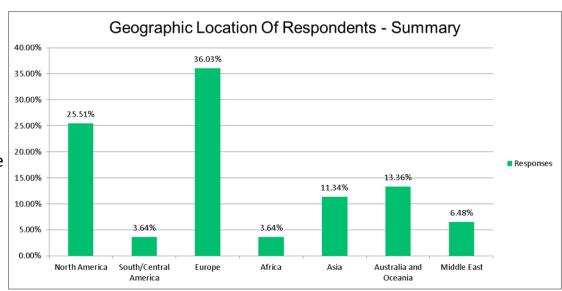
- Trade is not an end in itself, it is simply a mechanism to facilitate greater global prosperity and well-being.
- The increased trade will help global GDP through gains in scope and scale.
- These are conservative static calculations, they do not reflect dynamic impacts such as the creation of wholly new industries and the organic effects of new ideas and ways of doing things.

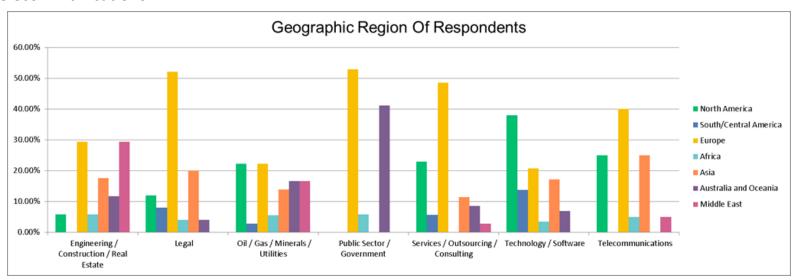


# **IACCM Survey Results**



- IACCM received responses from 247 of its members, of which 179 were from the top seven industry sectors:
- 1) Engineering, Construction, and Real Estate
- 2) Legal
- 3) Oil, Gas, Minerals, and Utilities
- 4) Public Sector and Government
- 5) Services, Outsourcing, and Consulting
- 6) Technology and Software
- 7) Telecommunications



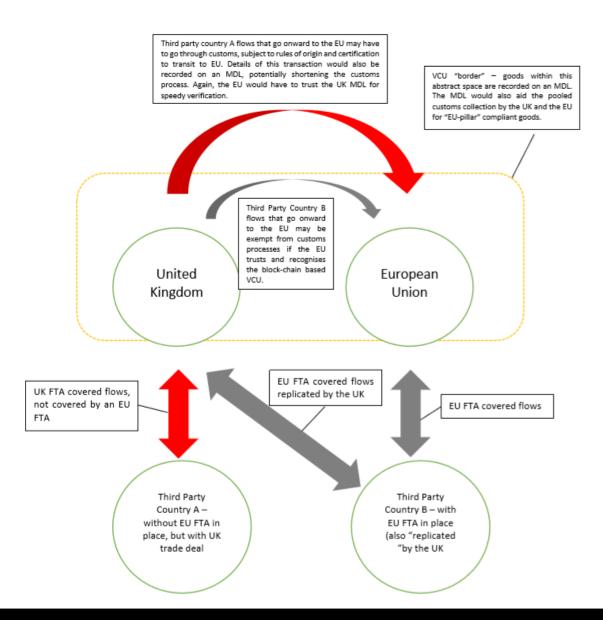




### What About Brexit?



Illustration of Cebr's Virtual Customs Union concept, coupled with a Smart Ledger solution





### **Conclusions**

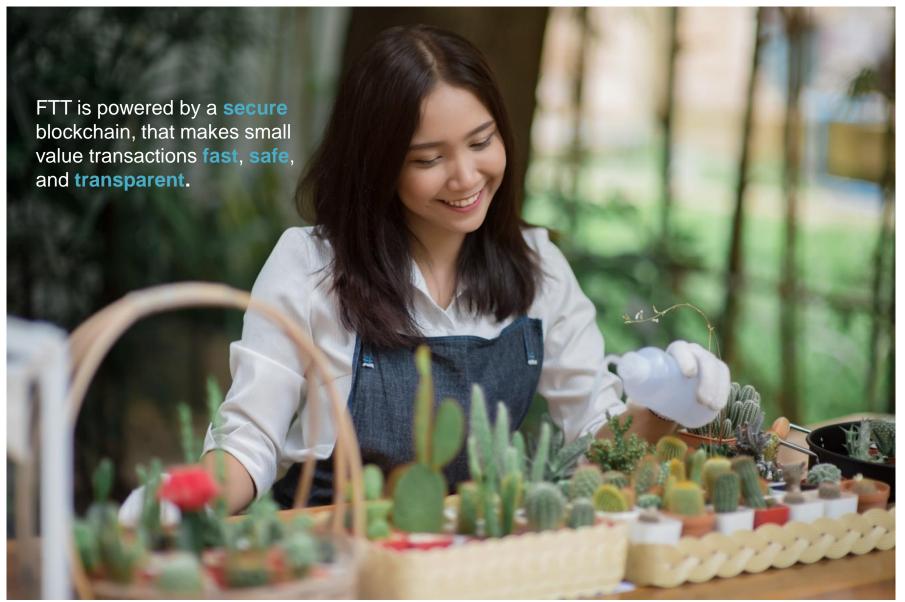


- Smart Ledger technology could boost world trade in goods by at least \$35 billion dollars per annum.
- The cost of importing a single container could, therefore, be reduced by around \$46, by simplifying procedures.
- These potential benefits are driven by a 2.5% cost clawback assumption, supported by case studies on previous technological advancements in trade and industry feedback.
- If reduced uncertainty is, also, taken into account, using option pricing theory, the potential gains become even larger, with a potential monthly net cost saving of \$172 million (or, approximately, \$2 billion per annum).
- ◆ This would boost world GDP by \$10 to \$20 billion and could, potentially, add between 450,000 and 900,000 to the worldwide demand for labour, boosting wages and living standards worldwide.



# **Economic Impact? Discuss...**







# A World Of Opportunities



#### **PANEL**

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Honorary Treasurer, Worshipful Company of World Traders
Lancaster Private Equity

Alderman Professor Michael Mainelli Master, Worshipful Company of World Traders

Jean-Claude Banon Liveryman, Worshipful Company of World Traders



# **Closing Remarks**



Dr Edwina Moreton OBE Senior Warden, Worshipful Company of World Traders