Aid for Trade in Small and Vulnerable Economies

Presentation by:
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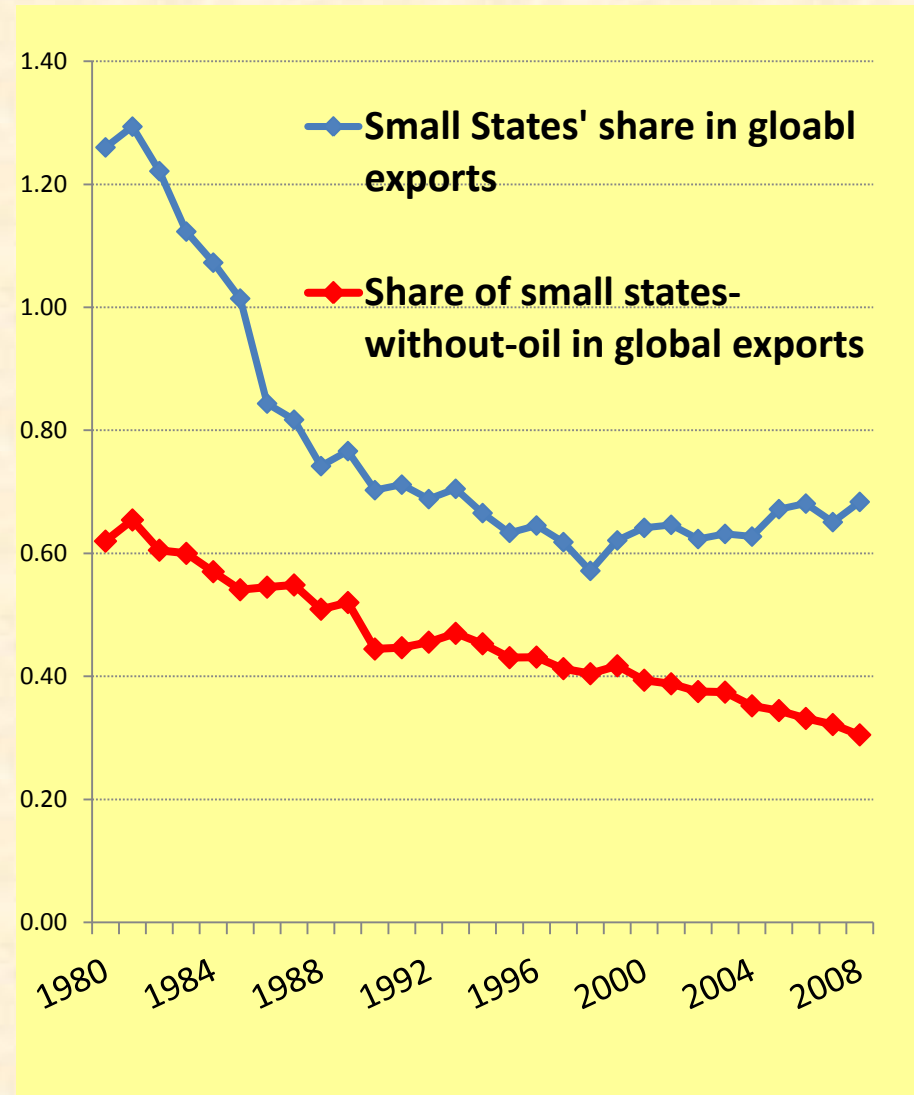Mohammad A. Razzaque - ComSec

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Background

- SVEs and the Commonwealth Secretariat
  - Supports member SVEs in their negotiation of multilateral and bilateral trade agreements
  - conducts policy research and consultations to understand the int'l trade and policy environment and to help better participation of SVEs
  - A source of technical assistance in the area of trade and development
- ODI has examined Aid for trade, and separately SVEs with respect to growth strategies, investment incentives, trade in services and climate change
- Aid for trade has been an important areas of ComSec and ODI work over the past decade
- Recent work has aimed to understand the effectiveness of AfT

Rationales of AfT for SVEs

- Six types of AfT according to the WTO
  - trade policy and regulation, trade development, trade related infrastructure, building productive capacity, trade-related adjustment and other trade related needs
- SVEs due to their peculiar features face unique challenges
  - Small populations and domestic markets
  - Lack of economies scale
  - Remoteness and isolation (high trading costs)
    - Lack of competition and efficiency
    - Costs of doing business in higher
  - Other features (weak institutions, weak human capital base, poor infrastructures and investment climate)
- The lack of effective supply response – weaker participation in global trade
- Marginalisation of SVEs in global trade

Marginalisation of SVEs

- SVEs: the long term trend in the share of merchandise exports (1948-2008) – from **1.05%** to **0.62%**.

- SVEs without oil – from **0.6%** in 1995 to **0.3%** in 2008.

- Services exports – **1.45%** (in 1985) to **0.95%** in 2008.

- **28** out of **39** SVEs had lower shares in world trade in 2008 than they had in 1995.

Legend:
- Small States' share in gloabl exports
- Share of small states-without-oil in global exports

Trade Adjustment Support

- Another important aim of AfT is to help countries adjust to multilateral liberalisation
  - adjustment requirements - from tackling export shortfalls to capacity development for dealing with new trade measures and provisions
- Adjustment support for loss of trade preferences could be vital for SVEs.

Estimated loss of preference for selected SVEs

	Estimated Loss of exports due to Preference erosion (million US$)	Preference loss as % merchandise exports
St Vincent & the Grenadines	**22**	**57.7**
St Lucia	30.5	42.2
Dominica	14.6	35.2
Sao Tome and Principe	1.1	28.8
Belize	32.7	12.3
Guyana	**69.3**	**11.8**
Mauritius	205.6	8.8
Fiji	55.5	8.2
St Kitts and Nevis	3	7.6
Vanuatu	1.9	5.2
Cape Verde	0.9	4.3
Jamaica	80.5	4.3
Barbados	18.4	4.2

Adjustment support for loss of trade preferences could be vital for SVEs.
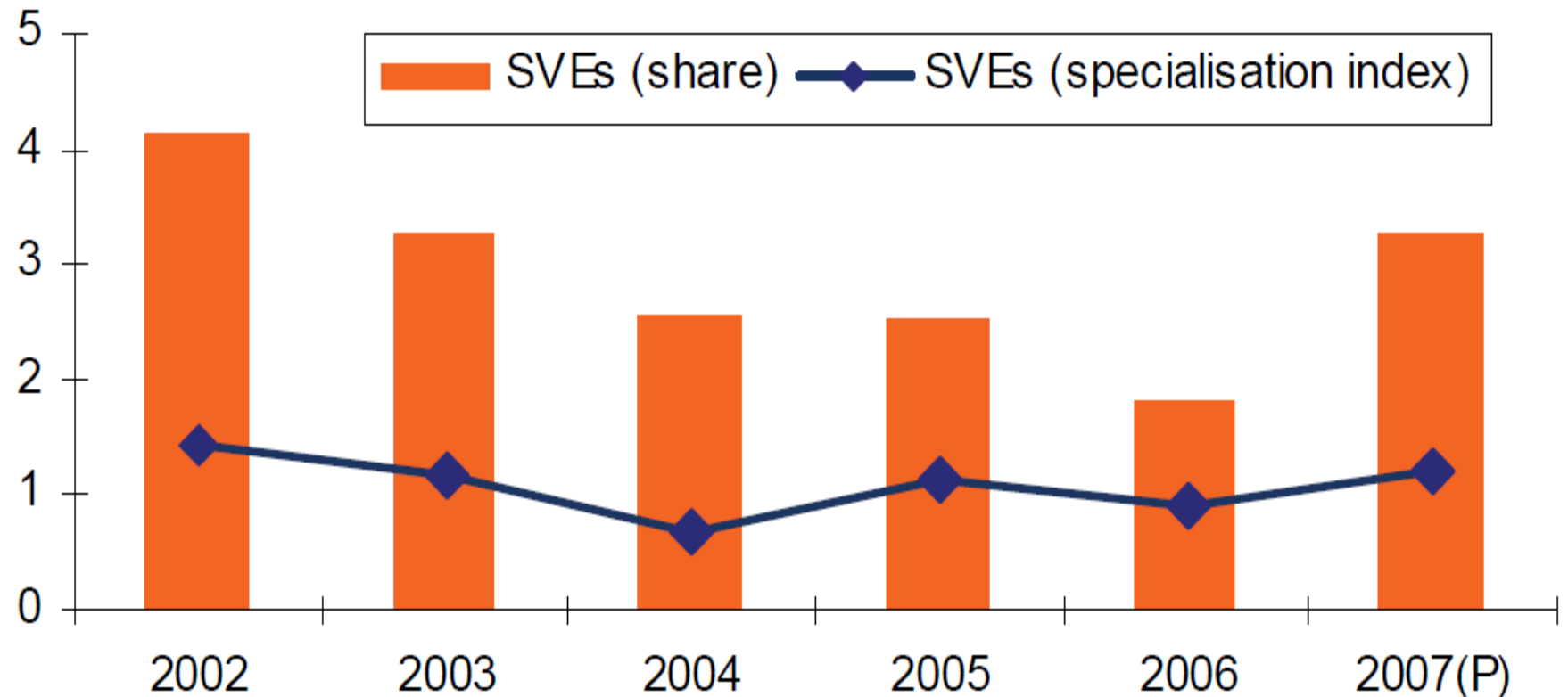
Aft Flows to SVEs

Figure 1: AfT to SVEs and other developing countries (US$ per capita)
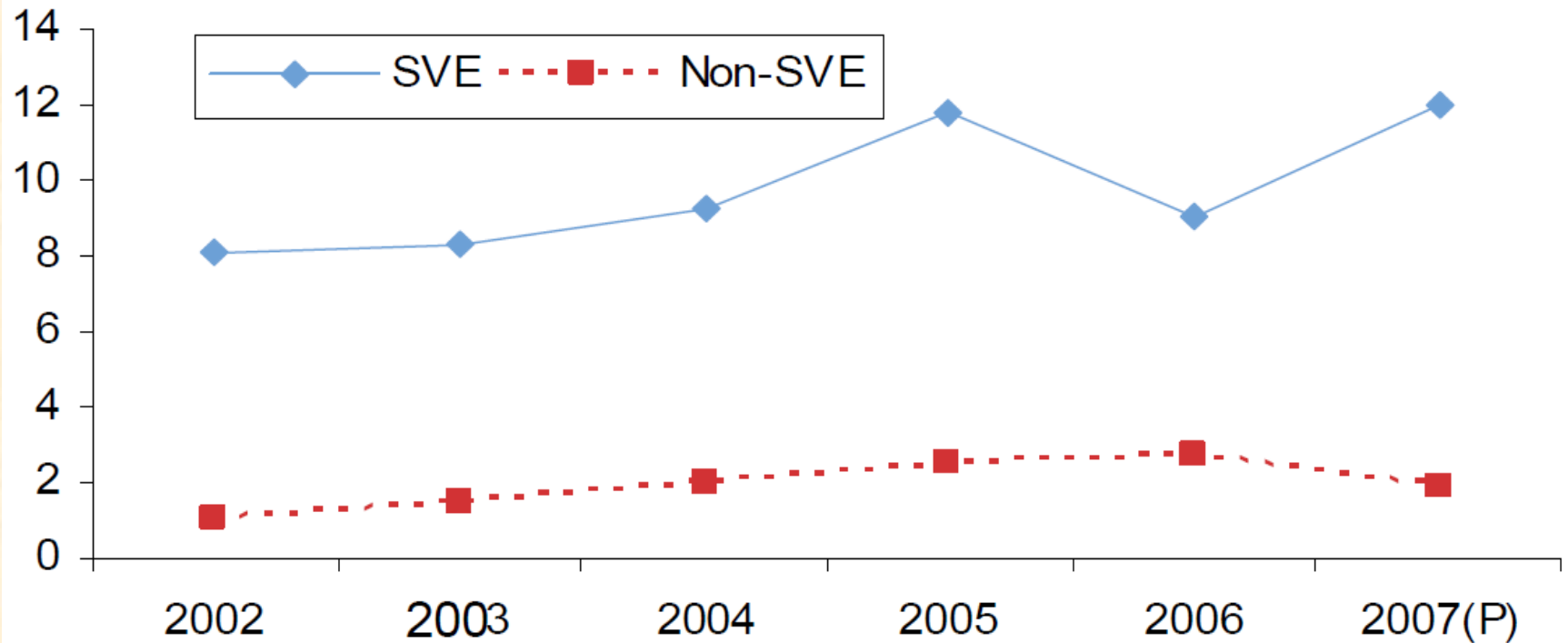
AfT per capita to SVEs is higher

Aft Flows to SVEs

Figure 2: AfT to SVEs (share in total and specialisation index)
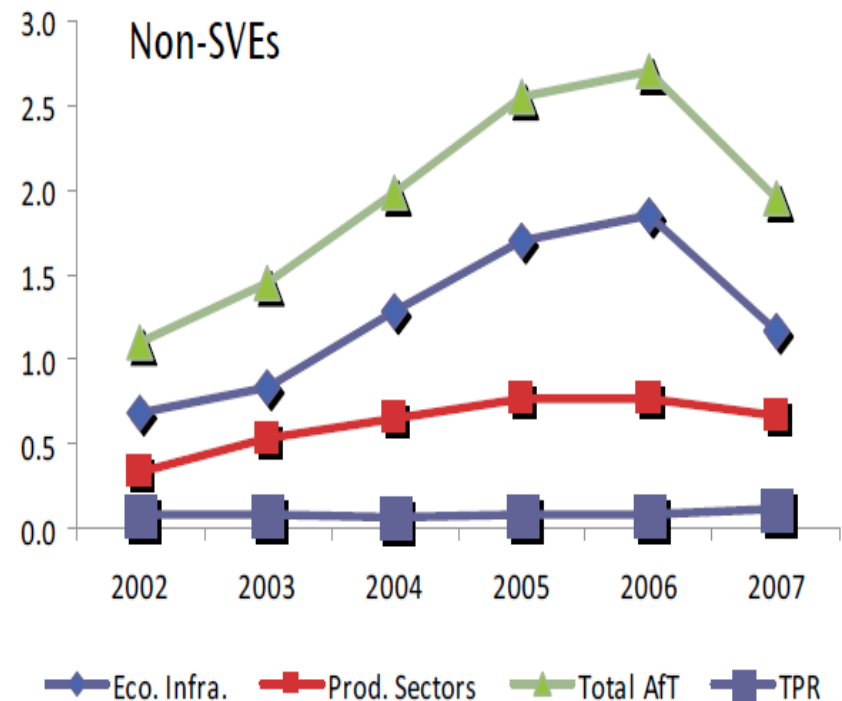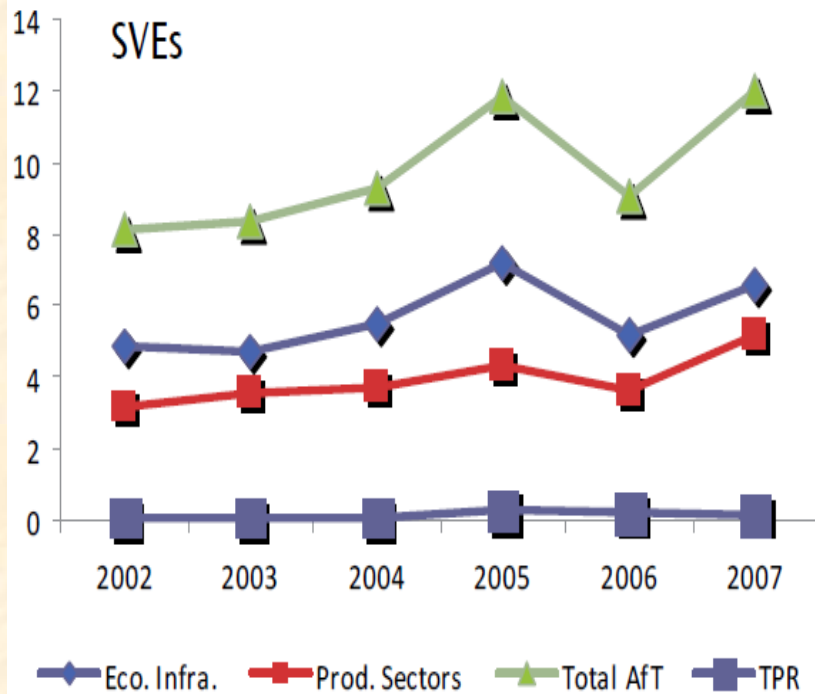
Specialisation index: the ratio of the share of SVEs in total AfT to the share of SVEs in total ODA.

Distribution of AfT Flows by types

The distribution of AfT in SVEs across main categories is broadly in line with that for other developing countries

Figure 4: AfT disbursement to SVEs and non-SVEs by category (US$ per capita)

AfT by category (disbursements in US$ per capita)

		2002	2004	2005	2006	2007[P]
Econ. Infra	SVE	4.8	5.5	7.2	5.2	6.6
	Non-SVE	0.7	1.3	1.7	1.9	1.2
	Ratio	7.1	4.3	4.2	2.8	5.7
Prod. Sectors	SVE	3.2	3.7	4.3	3.6	5.2
	Non-SVE	0.3	0.6	0.8	0.8	0.7
	Ratio	9.4	5.8	5.7	4.7	7.9
TPR	SVE	0.1	0.1	0.3	0.2	0.2
	Non-SVE	0.1	0.1	0.1	0.1	0.1
	Ratio	1.2	1.3	3.6	2.9	1.3
Total AfT	SVE	8.2	9.3	11.8	9.1	12.0
	Non-SVE	1.1	2.0	2.5	2.7	1.9
	Ratio	7.4	4.7	4.7	3.4	6.2
Total Aid	SVE	48.7	92.3	79.0	66.1	75.3
	Non-SVE	8.7	12.7	18.8	17.5	14.7
	Ratio	5.6	7.3	4.2	3.8	5.1

Studying the effectiveness of AfT

- Two approaches – case specific and overall
  - ➢ WTO/OECD case stories – useful insights
  - ➢ Overall effectiveness (mostly rely on quantitative methods)
- The aid effectiveness literature is vast and complex with mixed evidence but not many empirical studies on AfT.
  - – Brenton and Von Uexkull (2008) relates GTZ product-specific aid programme to countries' specific export goods
- Coverage of the present study is wider
- A theoretically consistent empirical framework to link AfT to export performance and other performance indicators
- Controlling for other relevant factors
- Use of time series data across countries (**panel data**)
- Estimations are carried out for SVEs and non-SVEs

Analytical Framework

- Use of an export demand model to link the effect of AfT

- Amongst others, the model postulates that exports are negatively related to trade costs

- AfT enters the picture by influencing admin & legal barriers, distance and infrastructures

- transportation costs are assumed to be a +ve (linear) function of distance and a -ve function of the level of economic infrastructures
  - In particular trade facilitation (TF) may reduce the time and costs of processing trade; and aid to economic infrastructure (A_{INFRA}) may increase the level

- The other channel through which AfT may affect exports is by strengthening country i's production competitiveness. This is the kind of assistance that aid to productive capacity (*Apc*) could provide.

Empirical Assessment

- More precisely, the empirical analysis examines:

  ➢ a) Impact of **aid for trade facilitation** on the **cost of trading**

  Cost of trading - measured by the time and costs of importing and exporting, i.e. handling and transporting a 20-foot container to (or from) the port of departure (or entry)

  $$\ln(IC)_{it}^{z} = \alpha_i + \phi \ln(1 + A_{tf})_{it-1} + KZ_{it-1} + \gamma_t + \mu_{it}$$

  where *IC* is an investment climate indicator for country i, such as the cost of trading, *Atf* is aid for trade facilitation (in mln US$) lagged one year, α_i is country fixed-effects, γ_t are time effects and *Z* is a vector of other determinants of *IC*, ε and μ are the error terms.

  ➢ b) Impact of **aid to economic infrastructure** and **aid to productive capacity** on **total exports**;

  $$X_{it} = \alpha_i + \gamma_1 Apc_{it-2} + \gamma_2 Ai_{it-2} + \gamma_3 MP_{it} + \gamma_4 p_{it} + \lambda_t + \varepsilon_{it}$$

  where *X* is the (log of) exports value in constant prices (country i, time t), *Apc* is (log of 1 +) aid disbursed to productive capacity and *Ai* is (log of 1 +) aid disbursed to economic infrastructure, MP is a market potential measure, and *p* is the level of prices (both in log); α_i country effects, λ_t estimation period effects.

  ➢ c) Impact of **aid to sectoral productive capacity** on **sectoral exports**.

  $$X_{ijt} = \alpha_{it} + \lambda_{jt} + \gamma_{ij} + \delta_1 Apc_{ijt-1} + \varepsilon_{ijt}$$

  where *X* is the (log of) value of exports (for country *i*, sector *j* and time *t*), *Apc* is (log of 1 +) aid to productive capacity, α_{ij} is country-year fixed effects, λ_{jt} is time-varying sector fixed effects, γ_{ij} is sector-country fixed effects.

Data Used in the Assessment

- AfT data come for OECD Creditor Reporting System (OECD-CRS)

  - Aid to Economic Infrastructure (Ainf – coded 200); Aid to production sectos (Apc); Aid for trade facilitation (Atf – coded 33120)

- These data have existed for some cases **since the mid-1970s. Because of gaps, we base most analyses for on the post-1994 period.**

- Costs of trading information are mostly from the World Bank Doing Buisness Reports. Data are more recent

- Sectoral export data from World Development Indicators

- Other macro data are from World Bank and IMF.

- Distance data from Mayer and Zignago (2006) – based on great circle formula

- Government effectiveness index from Kaufman et al. (2008) and the index of civil liberties from Freedom House (2009).

The effects of AfT on the costs of export

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	lcosexp	lcosexp	lcosexp	lcosexp	Lcosexp	ltimexp	lcosexp	lcosexp	lcosexp
Atf(t-1)	-0.085***	-0.054***		-0.055***		-0.041***	-0.056***	-0.058***	-0.058***
	(-6.49)	(-5.23)		(-5.41)		(-4.20)	(-5.42)	(-4.01)	(-4.01)
Ln Atf(t-1)			-0.191***		-0.188***				
			(-4.39)		(-4.20)				
Atredu(t-1)								-0.255	-0.261
								(-1.45)	(-1.49)
Gov. Eff. (t-1)		-0.217***	-0.209***	-0.219***	-0.212***	-0.053	-0.218***	-0.172	-0.222*
		(-3.82)	(-3.73)	(-3.84)	(-3.77)	(-0.84)	(-3.82)	(-1.56)	(-1.98)
Ln pop (t-1)		0.114	0.154	-0.027	-0.025	-0.005	0.110	-0.028	-0.043
		(0.57)	(0.78)	(-1.56)	(-1.46)	(-0.38)	(0.54)	(-1.01)	(-1.60)
Ln pop (t-1) sq.		-0.004	-0.005				-0.004		
		(-0.66)	(-0.87)				(-0.62)		
GDP (t-1)		-0.002	-0.009	0.007	0.001	-0.134***	-0.002	-0.008	0.013
		(-0.059)	(-0.24)	(0.20)	(0.018)	(-3.30)	(-0.045)	(-0.11)	(0.19)
Landlocked		0.565***	0.570***	0.596***	0.601***	0.466***	0.565***	0.588***	0.516***
		(7.49)	(7.67)	(7.71)	(7.88)	(5.84)	(7.43)	(4.07)	(3.78)
Asia		-0.322***	-0.304***	-0.340***	-0.327***	0.038	-0.324***	-0.319***	-0.271***
		(-4.93)	(-4.67)	(-5.52)	(-5.35)	(0.70)	(-4.89)	(-3.36)	(-2.81)
America		-0.152*	-0.134	-0.178**	-0.159*	-0.069	-0.157*	-0.144	-0.166
		(-1.86)	(-1.65)	(-2.14)	(-1.93)	(-0.85)	(-1.84)	(-1.17)	(-1.31)
Europe		-0.348***	-0.322***	-0.396***	-0.370***	-0.426***	-0.348***	-0.090	-0.110
		(-3.27)	(-3.05)	(-3.62)	(-3.39)	(-2.88)	(-3.26)	(-0.49)	(-0.62)
Atf(t-1)* SVEs				-1.265**		-0.528			3.528*
				(-2.04)		(-1.05)			(1.90)
Ln Atf(t-1)* SVEs					-1.214*		0.012A		
					(-1.96)		(0.30)		
Atredu(t-1)* SVEs									-24.223**
									(-2.57)
Obs.	203	201	201	201	201	201	201	89	89
R-squared	0.089	0.551	0.555	0.559	0.560	0.490	0.552	0.581	0.609

- Aid to trade facilitation (Atf) has significant **cost reducing effects**.

  - A US$ 1 million increase in Atf is associated with **2.5% - 5.4%** (i.e. US$30 to US$ 63) decrease in the cost of trading (handling and loading of a 20-foot container)

  - The Atf has much larger cost reducing effects for SVEs than others.

Key findings: AfT and exports

Assessment of Aid to economic infrastructure (Ainfra) and Aid to productive capacity (Apc)

> ➢ **Ainfra** is found to be **positively** associated with **exports**

> ➢ In most regressions, however, the effects are not significant for SVEs.

> ➢ Nevertheless, the effects (the size of coefficients) are **generally larger for SVEs** compared to non-SVEs

> ➢ Larger effects are more prominent for relatively recent periods

> > ❖ i.e. Support provided to productive sectors may have improved over time.

> ➢ However, aid to productive capacity fails to exert any positive and significant effects (both in IV and GMM regressions).

Total exports and aid for trade

	(1) SVE 1995-07 FE	(2) Non SVE 1995-07 FE	(3) SVE 1999-07 FE	(4) Non SVE 1999-07 FE	(5) SVE 1999-07 FE IV	(6) Non SVE 1999-07 FE IV
Aid for infra	0.005	0.029*	0.023	0.032**	0.170	0.100***
(t-1)	(0.16)	(1.94)	(0.68)	(2.21)	(0.97)	(2.71)
Aid to prod.	-0.054	0.004	-0.044	0.020		
capacity (t-1)	(-1.25)	(0.23)	(-1.08)	(1.47)		
CPI	0.475	-0.038	0.418	-0.082**	0.291	-0.061***
	(1.28)	(-0.89)	(0.88)	(-2.33)	(0.75)	(-3.15)
Market potential	-1.756	5.890***	0.799	5.088***	1.986	5.763***
	(-0.38)	(4.10)	(0.34)	(4.44)	(0.90)	(7.19)
Constant	33.704	-27.654**	11.978	-21.877**		
	(0.85)	(-2.29)	(0.62)	(-2.17)		
Observations	143	876	121	665	123	682
R-squared	0.571	0.641	0.505	0.649	0.299	0.609
Countries	17	83	17	83	17	82
Excluded Instruments						
Civil Liberties (t-3)					-0.280*	-0.465***
					(-1.71)	(-5.72)
1st stage F-Stat (for Aid for Infra)					2.91	32.77

Dependent variable is value of total exports in constant 2000 US$. All variables are in log; all regressions include year effects; Robust t-statistics in parentheses; * significant at 10%; ** significant at 5%; *** significant at 1%

Key findings: Aft and sector-specific exports

- Using OECD-CRS AfT data on sectoral aid is correlated with sectoral exports (data from WB).

  ➢ In the case of tourism, the estimated effects on tourism are higher for SVEs compared to non-SVEs, but statistically not significant for either.

  ➢ There is some evidence of +ve significant effects of AfT on mineral exports from SVEs.

  ➢ Apc and Ainfra seem to have **no significant effects for food/food processing and mfg** exports for SVEs. But for non-SVEs there are significant positive effects.

Concluding Remarks

- SVEs are in special need of AfT due to their inherent disadvantages in international trade

- There is some evidence of positive effects of AfT
  – Aid for trade facilitation seems to have significant cost reducing effects of handling exports
  – Aid to economic infrastructure has +ve effects on exports (although not being statistically significant in many cases)
  – Sectoral AfT does not seem to have +ve effects on sectoral exports
  – **Difficulties of empirical assessments** must be kept in mind (lack of data for SVEs)

- Scaling up AfT for trade facilitation and infrastructure would be a good strategy

- However, aid to productive capacity fails to register significant +ve effects for agricultural and manufacturing exports.

Concluding Remarks

- Efforts to better understand the productive capacity development in SVEs and how to support it
  - Traditional sectors versus sectors with dynamic comparative advantage

- Consider AfT programmes to address specific trade constraints faced by SVEs: remoteness, smallness and isolation.

- AfT to support adjustment costs – how it can be operationalised and how SVEs can use it productively

Thank you.