OSS 03 BEYOND OSINT: Creating a Global Multi-Cultural Intelligence Web 15-19 September 2003 Washington, D.C.

## Transfer Pricing: Income Tax and Import Duty Fraud

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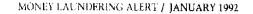
### Abnormally Priced Imports & Exports

- Abnormally Priced Exports:
  - US Rice Exports
- US Colombia Trade Reports
  - 1997 US Export to Colombia
  - 1997 US Import from Colombia

k MON	EY LAUNDERI	ING ALERT / JA	NUARY 1992	
See Story, Page 1				
Internation				ssibilities
li .	n varioi	is comme	odities	
COMMODITY	COUNTRY	COUNTRY AVERAGE PRICE	WORLD AVERAGE PRICE	PERCENT OF AVERAGE WORLD PRICE
U.S.	EXPORTS A	T LOW AVER	AGE PRICE	S
Electrical tape	Venezuela	\$.12/sq. meter	\$2.96	4%
Safety headgear	Colombia	\$2.28/doz	\$38.01	6%
Erythromycin	Iran	\$.10/gram	\$1.20	8%
Wire of nickel alloy	Venezuela	\$2.21/kg.	\$12.26	18%
Cooking stoves	Colombia	\$76.62/each	\$425.65	18%
Tin bars, rods & wire	Venezuela	\$1.57/kg	\$6.56	24%
Syringes	Colombia			29%
Tin waste and scrap	Colombia	\$.12/kg	\$.39	32%

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		ING ALERT / JA	NUART 1992	
See Story, Page 1				
Internation i		ey launde us comm		ssibilities
COMMODITY	COUNTRY	COUNTRY AVERAGE PRICE	WORLD AVERAGE PRICE	PERCENT OF AVERAGE WORLD PRICE
U.S. I	MPORTS A	T HIGH AVE	RAGE PRICE	S
Razors	Colombia	\$34.81/each	\$.09	38,933%
Razors	Panama	\$29.35/each	\$.09	32,820%
Ind. miners diamond	Venezuela	\$795.62/carat	\$6.45	12,335%
Pencils and crayons	Venezuela	\$371.29/gross	\$11.84	3,135%
Cut emeralds	Panama	\$974.58/carat	\$43.63	2,233%
Pens	Colombia	\$27.74/each	\$1.61	1,727%
Memo pads	Colombia	\$4.05/each	\$.28	1,427%
Alloy steel scrap	Venezuela	\$1,257.14/ton	\$93.75	1,341%
Cut rubies	Colombia	\$431.75/carat	\$48.73	886'%
Cut emeralds	Colombia	\$152.26/carat	\$43,63	349%



See Story, Page 1

#### International money laundering possibilities in various commodities

COMMODITY	COUNTRY	COUNTRY AVERAGE PRICE	WORLD AVERAGE PRICE	PERCENT OF AVERAGE WORLD PRICE
UK	S. EXPORTS A	T HIGH AVER	AGE PRICE	S
Tetracyclines	Colombia	\$180.09/gram	\$1.76	10,254%
Erythromycin	Colombia	\$79.07/gram	\$1.20	6,599%
Erythromycin	Venezuela	\$74.94/gram	\$1.20	\$1.76 10,254% \$1.20 6,599% \$1.20 6,255% \$.20 3,309%
Chlorine	Venezuela	\$6.62/kg	\$.20	3,309%
Adhesive tape	Venezuela	\$54.17/kg	\$5.55	976%

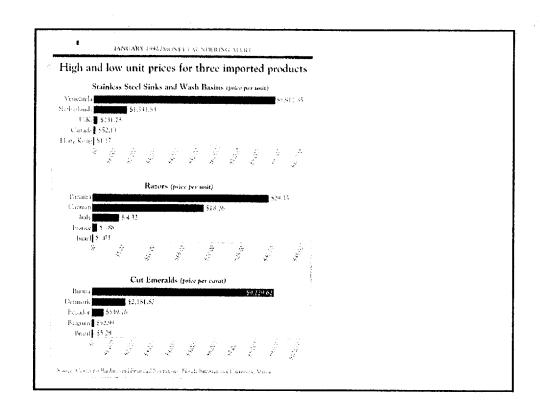


MONEY LAUNDERING ALERT / JANUARY 1992

See Story, Page 1

#### International money laundering possibilities in various commodities

COMMODITY	COUNTRY	COUNTRY AVERAGE PRICE	WORLD AVERAGE PRICE	PERCENT OF AVERAGE WORLD PRICE
U.S. I	MPORTS AT	LOW AVER	AGE PRICE	S
Cooking stoves	Venezuela	\$10.00/each	\$500.00	2%
Onion or garlic oils	Colombia	\$6.00/kg	\$66.66	9%
Molasses	Colombia	\$.008/liter	\$.07	11%
Cut emeralds	Brazil	\$5.29/carat	\$43.63	12%
Cut sapphires	Colombia	\$3.39/carat	\$21.18	16%
Clinical thermometers	Colombia	\$.12/each	\$.74	16%
Calcium carbonate	Venezuela	\$.10/kg	\$.48	22%
Razors	Israel	\$.03/each	\$.09	35%





## U.S. Imports At High Average Price

		COUNTRY AVERAGE	WORLD AVERAGE
COMMODITY	COUNTRY	PRICE	PRICE
Untrimmed Pillowcases (#)	France	909.29	.62
Unrecorded Mag. Discs (#)	Spain	698.16	.43
Sand (Ton)	Spain	1,993.67	11.20
Flashbulbs (#)	France	321.90	.66
Balls For Ball Point Pens(#)	France	1.43	.007
Single Edge Razor Blades (#)	France	5.33	.04
Cordless Telephones (#)	France	4,232.50	47.65
Raw Cane Sugar (Kg)	U.K.	1,407.00	.50
Slip Joint Pliers (#)	U.K.	489.75	.88

Over-invoiced Import:
Money Laundering? Income Tax Evasion?



## U.S. Exports At Low Average Prices

		COUNTRY	WORLD
		AVERAGE	AVERAGE
COMMODITY	COUNTRY	PRICE	PRICE
HERRING-BONE TIRES (#)	FRANCE	7.69	192.25
ENRICHED 235 URANIUM (KG)	SPAIN	15.50	172.22
MACHINE GUNS (#)	FRANCE	364.08	2,022.67
MILITARY RIFLES (#)	U.K.	106.87	387.55
ERYTHROMYCIN (GM)	IRAN	.08	1.20

Under-invoiced Export:

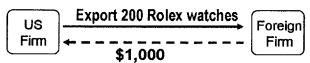
Money Laundering? Income Tax Evasion?



## **Under-Invoiced Exports**

Move \$1,000,000 from US to Foreign Firm Through US Export at Low Price

- 1. US Firm Has \$1 million To Move to Foreign Firm
- 2. US Firm Buys 200 Rolex watches at \$5,000/ea (Pay \$1,000,000)
- 3. Sell/Export 200 watches to Foreign Firm at \$5.00/ea



4. The Foreign Firm: Sell 200 Rolex watches at \$5,000/ea = \$1,000,000



#### **Money Laundered Out of the United States**

#### **Undervalued U.S. Exports**

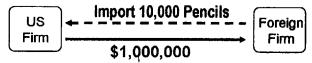
Product	Country	U.S.C.D.	Month	Price
Bulldozers (New)	Venez.	Norfolk	5	\$387.73/unit
Rocket / Grenade Launchers	Venez.	Miami	10	\$59.50/unit
Prefabricated Buildings	Haiti	Miami	12	\$2.12/unit
Forklift Trucks	Haiti	Miami	2	\$555.73/unit
New Tires	Russia	Seattle	11	\$3.97/unit
Color Video Monitors	Russia	New York	2	\$28.99/unit



## Over-Invoiced Imports

Move \$1,000,000 from US to Foreign Firm Through US Import at High Price

- 1. US Firm Has \$1 million To Move to Foreign Firm
- 2. Foreign Firm Buys 10,000 Pencils at 10 cents (\$1,000) locally
- 3. Foreign Firm Sells 10,000 Pencils to US Firm at \$100 each



4. US Firm pays \$1,000,000 to Foreign Firm



#### Money Laundered Out of the United States

**Overvalued U.S. Imports** 

Product	Country	U.S.C.D.	Month	Price		
Oats	Venez.	New York	5	\$142.87/ Kg		
Women's Cotton Briefs	Venez.	Miami	3	\$50/unit		
Used Clothing	Haiti	LA	3	\$260/Kg.		
Slide Projectors	Haiti	Savannah	5	\$8,620/unit		
Binoculars	Russia	San Fran.	6	\$3,395/unit		
Emeralds	Russia	New York	7	\$17,976/car		



#### **Money Laundered Into the United States**

**Overvalued U.S. Exports** 

Product	Country	U.S.C.D.	Month	Price
Spark Plugs	Venez.	Norfolk	2	\$313/unit
Used Clothing	Venez.	Miami	1	\$724/Kg
6 Volt Batteries	Haiti	Miami	4	\$5,236/unit
Dot Matrix Printers	Haiti	Miami	10	\$36,193/ unit
Inflatable Toy Balls	Russia	New York	7	\$4,770/unit
Smoke Detector - Battery	Russia	New York	9	\$5,595/unit



#### **Money Laundered Into the United States**

#### **Undervalued U.S. Imports**

Product	Country	U.S.C.D.	Month	Price
Ceramic Sinks	Venez.	Miami	6	\$1.13 / unit
Mackerel	Venez.	Miami	5	\$0.24 / Kg
Greeting Cards	Haiti	Miami	10	\$20.00 / Ths
Transformers	Haiti	Miami	12	\$0.53 / unit
Diamonds	Russia	New York	4	\$0.78 / carat
Caviar	Russia	Los Angeles	5	\$3.38 / Kg



## Impact of Trade Price Manipulation

- Over-invoiced Imports
  - Income tax avoidance
  - Money laundering from illegal activities
  - Capital flight
  - Justify excessively high domestic prices under price control
  - Conceal illegal commissions
- Under-invoiced Imports
  - Avoid/Reduce import duties
  - Dumping at below market prices



### Impact of Trade Price Manipulation

- Under-invoiced Exports
  - Income tax avoidance
  - Money laundering from illegal activities
  - Capital flight
  - Avoid export surcharge
  - Conceal illegal commissions
- Over-invoiced Exports
  - Increase export subsidies



## U.S. Merchandise Trade Data

- Distributed by the Census Bureau
  - Two CD's each, monthly:

Exports Imports

Disk size (Dec 1999) 371 MB 641MB

Transactions(1999) 20,420,064 30,173,714

Records(Dec 1999) 1.1 million 1.5 million

- All Import and Export Transactions
  - Ten digit harmonized commodity code
     8,635 export codes in 1999
     17,179 import codes
  - Country 233 countries in 1999
  - Customs district 44 customs districts
  - Month
  - Quantity & Dollar value



Money Moved Out of the U.S. through Trade And Tax Loss through Trade

<u>Year</u>	<u>Money</u>	Tax Loss
1998	\$105 bn	\$35.7 bn
1999	\$126 bn	\$42.8 bn
2000	\$131 bn	\$44.5 bn
2001	\$156 bn	\$53.1 bn



#### Switzerland's 1998 Money Laundering Law

Impact of the Law on Money Moved Through Swiss-U.S. Trade

Before: \$370 million / month After: \$776 million / month

Increase: 110%



#### GLOBAL PRICE MATRIX

- Compute the medians, the upper quartiles, and the lower quartiles using one year monthly data
- IRS Reg 482 on transfer pricing
- Applied to the US vs. Chen case
  - Accused of over-invoiced imports



#### Price Matrix Filter

- Global Price Matrix contains:
  - For each commodity code and each country

    The average price and the standard deviation

    Upper bound = the mean + a x STD or Upper Quartile Price

    Lower bound = the mean a x STD or Lower Quartile Price
  - Total Number of Cells in 1999
    - $= (8,635 + 17,179) \times (233+1) = 6.04$  million cells

	1	•	orts of "Other Mu	-	•	orters	
		(HTSUSA	=0712302000,KG	from China(T	alwan)		
:	Entry No.	Line No.	Date	Qty (KG)	Line Value	Price per KG	
1	EntryNo	001	900511	910	\$3,576	\$3.93	minimum price
2	Entry No	001	901016	2,939	\$21,222	\$7.22	•
3	Entry No	003	900129	1,701	\$14,870	\$8.74	
4	Entry No	003	900827	227	\$2,160	\$9.52	
5	Entry No	009	900810	1,288	\$13,202	\$10.25	
6	Entry No	001	900606	1,588	\$17,350	\$10.93	
7	Entry No	001	901213	98	\$1,146	\$11.69	
8	Entry No	001	900918	1,165	\$16,400	\$14.08	
9	Entry No	001	900313	3,685	\$59,138	\$16.05	
10	Entry No	001	900430	3,685	\$59,293	\$16.09	
11	EntryNo	001	900424	454	\$7,700	\$16.96	lower quartile pric
12	Entry No	001	900612	680	\$12,300	\$18.09	
13	Entry No	001	901227	320	\$8,000	\$25.00	
14	Entry No	001	900604	55	\$1,635	\$29.73	
15	Entry No	001	900126	2,703	\$86,360	\$31,95	
16	Entry No	001	901203	100	\$3,200	\$32.00	
47	Entry No	001	900207	2,613	\$89,222	\$34.15	
18	Entry No	001	900207	2,871	<b>\$9</b> 9,502	\$34.66	
19	Entry No	001	900314	2,830	\$98,612	\$34.85	
20	Entry No	001	900515	1,388	\$48,520	\$34.96	
21	EntryNo	001	900517	2,703	\$94,525	\$34.97	median price

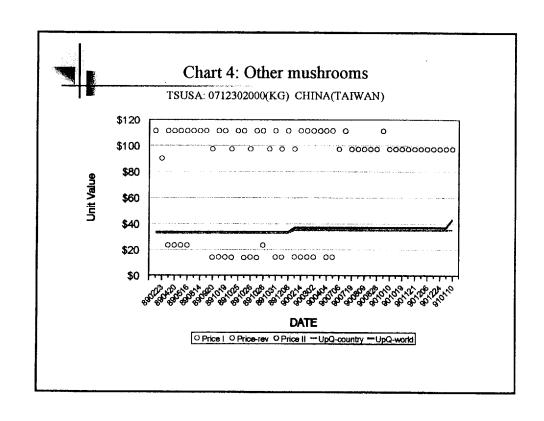
IABLE 3-	1	1990 lmp	orts of "Other Mu	shrooms" by A	JI Other US Impor	ters		
#	· · · · · · · · · · · · · · · · · · ·	A SUSTH)	HTSUSA=07.12302000,KG) from China(Talwan)					
	Entry No.	Line No.	Date	Qty (KG)	Line Value	Price per KG		
21	EntryNo	001	900517	2,703	\$94,525	\$34,97	median price	
22	EntryNo	001	900212	2,703	\$94,526	\$34.97	<b>,</b>	
23	EntryNo	001	900326	2,703	\$94,526	\$34.97		
24	EntryNo	001	900906	2,703	\$95,002	\$35.15		
25	EntryNo	001	901009	2,703	\$95,002	\$35.15		
26	EntryNo	001	900802	272	\$9,564	\$35,16		
27	EntryNo	001	900723	2,695	\$94,880	\$35.21		
28	EntryNo	001	900815	1,207	\$42,560	\$35.26		
29	EntryNo	001	900829	1,207	\$42,560	\$35.26		
30	EntryNo	001	901001	1,207	\$42,560	\$35.26		
31	EntryNo	001	901011	1,207	\$42,560	\$35.26	upper quartile price	
32	EntryNo	001	901024	1,207	\$42,560	\$35.26		
33	EntryNo	001	901217	1,207	\$42,560	\$35.26		
34	EntryNo	001	900830	1,207	\$42,560	\$35.26		
35	EntryNo	001	900322	2,762	\$97,542	\$35.32		
<b>36</b>	EntryNo	901	900409	2,776	\$99,099	\$35.70		
37	Entry No	001	900228	1,207	\$43,491	\$36.03		
38	Entry No	001	900320	2,703	<b>\$97,44</b> 6	\$36.05		
19	EntryNo	001	901001	2,400	<b>\$87,38</b> 9	\$36.41		
Ю	EntryNo	001	900312	91	\$3,368	\$37.01		
41	EntryNo	001	900709	91	\$3,370	\$37.03	maximum price	
	TOTAL			68,261	\$1,971,058	\$28.88	average price	



## 0712302000 OTHER MUSHROOMS [KG]

## REFERENCE PRICES OF US-TAIWAN TRANSACTIONS EXCLUDING DEFENDANT'S TRANSACTIONS BY YEAR

	1989	1990	1991
Highest	\$41.90	\$37.03	\$39.70
Upper Quartile	\$33.03	\$35.26	\$35.38
Median	\$31.95	\$34.97	\$26.42
Average	\$27.88	\$28.88	\$20.85
Lower Quartile	\$29.19	\$16.96	\$6.50
Lowest	\$1.23	\$3.93	\$3.37





## Audits and Physical Inspection

- Audits & Inspection Purpose
   Determine if the transaction prices reflect true market prices
  - Examination of trade documents
  - Physical inspection of cargo
- Audits & Inspection Practices
  - Customs Agents
    - Lack of benchmark pricing data Difficult to determine abnormality
  - Pre Shipment Inspection firms
    - All specified inbound cargos inspected



## Costs and benefits of Audits and Physical Inspection

- Costs of Audits/Inspection
  - PSI About 1% of the value of the inspected cargo
    - Fee for Indonesia in the 90's \$500 million/year
  - Customs agents
    - Agents wages
    - Operating expenses
    - Physical space
    - Delays in the movement of goods
- Benefits of Audits/Inspection
  - Increased tax revenue
  - Increased duties
  - Reduction of capital flight
  - Reducing dumping by foreign producers
  - Curtailment of money laundering
  - Asset seizures of criminals



#### Optimal Level of Audits & Inspection

- What & How much to inspect?
- No Audit/Inspection
  - No costs and no benefits
- Exhaustive 100% Audits/Inspection
  - Maximum benefits but also maximum costs
- Random Audits/Inspection
  - Assumes Samples selected for audit/inspection have equal probabilities of being abnormal as the population
  - Maybe preferable to No audit or Exhaustive audits



#### Optimal Level of Audits & Inspection

- Statistical Approach in Audits/Inspection
  - Determine the benchmark upper and lower bounds of prices
    - Based on statistical Analysis of historical prices
    - For each commodity category
  - Transactions with prices outside the benchmark prices
    - Higher probability of being abnormal than the population
    - The narrower bounds of the benchmark prices, the more numerous the transactions with abnormal prices



#### Applications of Trade Price Analysis

- Governments: US & Foreign: Investigative Analysis
  - Money Laundering
  - Tax Evasion
  - Import Duty Fraud
- Banks: Avoid trade financing illegal transactions
- Accounting Firms: Auditing Transactions
- Attorneys: Litigation Evidence
- Insurance: Avoid Insurance Fraud
- Business: Monitoring Abnormal Trade Patterns



#### Current and Future Research

- Lost Income Tax
- Import Duty Loss
- Impact of Money Laundering Regulations on Capital Flight through Trade: <u>The Case of Switzerland</u>
- Effectiveness of the Pre-Shipment Inspection (PSI) in Pakistan: An Empirical Test
- Economic Determinants of Capital Flight through Trade
- Weight Analysis
- Impact Of Trade on Stock Prices
- Product Market Analysis
- Balance of Trade Adjustment?



## bnormal Weights: US Imports 1998 Jan - May

0901110010		Coffee, Arabica, not roasted, not decaffeinated						
Country	District of Entry	District of Unlading	Month	Quantity	NON	Vessel Weight	Unit Weight	
Lower Q	uartile	L	L	L	L		1.008	
Median							1.010	
Upper Q	uartile						1.013	
Colomb	MIAMI	MAMI	04	138,065	KG	151,913	1.100	
Hondura	SEATTLE	NEW ORL	04	207,000	KG	228,450	1.104	
Hondura	SEATTLE	NEW ORL	03	172,500	KG	193,700	1.123	
Indnsia	SEATTLE	NYCITY	05	13,962	KG	15,942	1.142	
Nicarag	SEATTLE	NYCITY	05	13,280	KG	15,257	1.149	
Brazil	NORFOLK	NYCITY	04	46,283	KG	54,450	1.176	
C Rica	SEATTLE	SAN FRN	01	345,000	KG	417,412	1.210	



## Abnormal Weights: US Imports 1998 Jan - May

8511100000		Spark Plugs - internal combustion engine						
Country	District of Entry	District of Unlading	Month	Quantity	UOM	Vessel Weight	Unit Weight	
Lower Q	uartile						0.83	
Median							5.32	
Upper Qu	uartile						7.19	
	-		_				_	
Japan	CHICAGO	NYCITY	01	1	HUN	112	112.00	
Japan	CHICAGO	SEATTLE	05	1	HUN	135	135.00	
China T	LOS ANG	LOS ANG	05	17	HUN	3,517	206.88	



#### Price Matrix: 1998 US Imports from Mexico

Median, Lower Quartile, and Upper Quartile Prices

For

US - World Trades AND US - Mexico Trades

Produced by

Trade Reserch Institute, Inc.

06/21/99

1998 Mexico Import Matrix

TRI Website

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