

Cross-checking the Sund database with the French Balance du Commerce

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*Sound Toll Registers online – to the
test STR online as an instrument for
historical research*

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Introduction

- Sund database: great project !
 - No need to elaborate on this here
- Might even allow to increase our knowledge of non-Sund trade...
 - Because it provides an occasion to check a number of data sources
 - And they are at least two other projects on close subjects
 - Navigocorpus (Marzagalli) : navigation
 - Collecting 300 000 return voyages in France during the 18th century
 - – 3 teams + 30 associated researchers
 - European statistics (myself and Loïc): trade statistics
 - Collecting “agregate”, product/partner statistics for European trade in the 18th century
 - Not yet funded. Meeting in Lille and London in spring 2011.
 - 40+ people interested all over Europe and the Atlantic
- So, today: comparison of the French Balance du Commerce and the Sund Toll database
 - The French Balance du Commerce
 - Comparing them
 - Results
- Apologies: it is going to be sorry tale...
 - Mainly because a number of cargoes do not have “cargo codes” in the database

The French balance du commerce (1)

- What is it ? Bureau of the balance of trade
 - Bureau de la balance du commerce
 - Small department in the French central administration
 - Active from 1713 to 1792
 - Produced nearly complete bilateral trade data from 1716 to 1792
 - Its successor functioned during the Revolution
- A short history
 - Born out of the trade negotiation for the peace of Utrecht
 - Major change of status in 1781-1783: more money, more prestige...
- The rise of expertise ?
 - Not simply annual trade statistics
 - Specific studies for the negotiation of trade treaties with the US, Russia and Great-Britain in the 1780s
 - Amazing counter-factual task of evaluating the result of the equalization of all French tariffs (not on trade flows, but still...) (we might even find the result of this work)

The French balance du commerce (2)

- Collection of quantities?
 - Always mainly from the local offices of the farms
 - Which had offices outside the custom union and even in the free ports (Marseilles, Dunkerque, Bayonne...)
 - Could never get data from Alsace and Lorraine
 - Needed collaboration with the Navy for:
 - Colonial trade (after 1781) / New 1784 free ports and Exclusif mitigé (but very expensive)
 - Foreign trade (through consulates)
- Collection of prices?
 - Chambres de Commerce and Intendants during the first bureau
 - At the end of N+1, added prices to a report on their region's trade
 - Prices did not follow short-term variations / tracked long-term variations
 - After 1781, prices recorded at the same time as quantities
 - By the local offices of the farms (or the Navy)
 - They were used to negotiating prices with traders for ad valorem prices

The French balance du commerce (3)

- Work from the first bureau: trade balances
 - Apparently, it did produce trade balances, by country, goods and generalities
 - From 1716 to 1749: all that is left is a latter recapitulation giving exports and imports per country (down to 1781)
 - + Arnould's book: seemed to have data on trade per goods and per partners for 1716
 - 1750-80 : hundred page annual summaries of trade per partners and per goods (6 missing years)
 - 1753-80 per généralités and partners (15 missing years)
 - + miscellaneous documents
 - All manuscript
- Work from the second bureau: trade balances
 - Was much less efficient for “basic” data
 - A derelict document shows it was computed for 1782, 1784 and 1787-90
 - Imports and exports per trade partner exist for 1782
 - General summaries (6-12 pages) exist for 1787-9 (and 1792, 1795 onward) per good and per partner
 - Separating West Indies trade
 - Measuring species movements
- 3 years have been transcribed (1752, 1767 and 1772)
 - Here : based on a partial transcription of 1780 (not all years have quantities)

5

Enlève

Marchandises	Lieu	Quantités	Value	Total	Marchandises
Hemitacortum	Paroye	18000		18000	Herbes
Histoire naturelle	France	1600		1600	
Horlogerie	Allemagne	1942		52726	Houblon
	Flandre	263			
	Genève	16173			
	Suisse	18026			
Houblon	Angleterre	4432		55613	Houblon
	Flandre	29163			
Haupes de cignea	Flandre			1323	
d'omande	Genève	13005		3800	}
	Hollande	29412		13123	
de gressle	Allemagne	2923		2652	
	Espagne	6321			
de graines	Flandre	19365		176036	
	Hollande	45263			
	Nord	2763			
	Allemagne	4180			

Comparing them (1)

- Declared quantities
 - Effect of war on the Sund
 - Allows checking suspicious ships
- Types of goods
 - Rye instead of wheat in the Sund?
 - More precise taxonomy in the Sund (pitch and tar) / Or in the BdC (wines)
- Types of country
 - The BdC has a single “North” for the whole Baltic (Denemark, Sweden and Russia latter on)
- Using prices from Amsterdam, Riga or Dantzic?
 - The BdC always give values, sometime quantities
- Better understand some re-export flows
 - A small Swedish harbour sends iron only to Nantes. Actually these goods are for slave trade

Comparing them (2)

- The work on the Sund is made much easier by the relational database
 - Using Access, it is easy to create a “flat” file listing all the cargoes that went through the Sund from / to ports in modern France
 - Though aggregation is not that easy: “amount” does not seem to be a number field?
- After some work with:
 - The units of measures
 - Need to put their values in kg, litres...
 - The country (BdC : Nord / Suède / Danemark / Russie)
 - Some work with the goods (not the same)
- After, that, playing with Excel pivot tables
 - To get the aggregation of the exists and the entries

	casser	en nombre	kg	litre	livre tournois	pièce	Total
▼ alun							
Danemark			6 250 344				6 250 344
Nord			967				967
Suède			89				89
▼ amandes							
Danemark			15 467				15 467
Nord			24 079				24 079
Russie			5 069				5 069
Suède			935				935
▼ chanvre							
Russie			85 188				85 188
▼ citrons							
Danemark				24 244			24 244
Nord	12						12
Suède				76 822			76 822
▼ coton							
Danemark			164				164
Suède			733				733
▼ fruits							
Danemark			27 441	11 246			38 687
Nord			92 420				92 420
Russie			223 960	12 706			236 667
Suède			125 738	135 235			260 973
▼ hareng							
Suède				38 398			38 398
▼ huile							
Danemark				1 131			1 131
Nord				8 328	2 705	26	11 059
Russie				2 751	84	6	2 841
Suède				4 409		19	4 428
▼ indigo							
Danemark			3 619				3 619
Nord			10 768				10 768
Russie			23 552				23 552
Suède			829				829
▼ lard							
Danemark			803				803

	kg	litre	pièces	(vide)	Total
▼ acier	5 519				5 519
Suède	5 519				5 519
▼ alun	84 486				84 486
Suède	84 486				84 486
▼ canevas			110		110
Russie			110		110
▼ chanvre	2 380 807	383		#VALEUR!	#VALEUR!
Danemark	76 037				76 037
Nord	209 555				209 555
Russie	2 095 215	383		#VALEUR!	#VALEUR!
▼ cire	14 153				14 153
Nord	1 116				1 116
Russie	13 037				13 037
▼ fourrure de			240	#VALEUR!	#VALEUR!
Nord				#VALEUR!	#VALEUR!
Russie			240		240
▼ froment		110 979			110 979
Russie		110 979			110 979
▼ graine de lin		73 000			73 000
Russie		73 000			73 000
▼ Gros de Grain		110 998			110 998
Russie		110 998			110 998
▼ laine	43 078				43 078
Nord	26 293				26 293
Russie	16 785				16 785
▼ lin	7 440				7 440
Russie	7 440				7 440
▼ merreins (pour faire des douves de fûts)			27 319		27 319
Nord			26 059		26 059
Russie			1 260		1 260
▼ orge		5 843			5 843
Nord		5 843			5 843
▼ planches			2 242		2 242
Nord			203		203
Russie			2 039		2 039
▼ potasse	13 541				13 541
Nord	13 541				13 541
▼ tabac	300 655				300 655
Nord	77 225				77 225
Russie	223 430				223 430
▼ toile cirée			110		110
Russie			110		110
Total	2 849 680	301 203	30 020	#VALEUR!	#VALEUR!

Results (1)

- French exports in the BdC, not in the Sund
 - Foodstuff: Anchovies, jams, caper, wine (!)
 - Exotic products: exotic wood, cocoa, coffee, tafia, tea
 - Epicerics: cumin, oak apple, madder, gums, seeds, liquorice juice, liquorice, pumice, annato, senna, face powder, tartar, drogueries, perfumes, alcohols, vinegar, verdigris
 - Textiles: silk hosiery, cords, lace, woollens, silks textiles, cork, spirits, wool, haberdashery, handkerchiefs, linen cloth, hats
 - Various manufactured goods: aracq (?), silver, wood circles, prints, earthenware, iron pots, glass, musical instruments, skins, marble, china, window glass
 - (62% of value ! – 24% of weighted goods – 83% volume goods)
- French exports in the Sund, not in the BdC
 - Hemp (to Russia ?) Herrings, lard, sumac, alum (btw, rhus is not a modern french word)
 - Résine (turbentine?)
 - Smaller (well, except alum: 43% weight, less than 1% volume)

cargoes : Table													
id_doorvaart	line	from	from_code	till	till_code	measure	amount	cargo	cargo code	tax taler	tax skilling	alt measure	alt
161991	7	Stockholm	221STC	Rouen	809ROU	lispund	10	allun	3360	2	6		
95661	5	Norkøping	233NOK	Marseille	831MRS	skippund	2 1/2	allun	3360	1-feb	6		
178722	8	Marseille	831MRS	Stockholm	221STC	skippund	1 1/3	allun	3360		16		
216090	2	Gottenborg	271GOT	Østersøen	491OEE	Skippund	3 2/5	Allun	3360	1-feb	17		
91770	6	Stockholm	221STC	Bordeaux	804BOR	lipund	13	allun	3360	4	12		
91770	5	Stockholm	221STC	Bordeaux	804BOR	skippund	17	allun	3360				
161460	10	Amsterdam	501AMS	Liebau	371LIB	skippund	1-mrt	allun	3360		4		
166515	8	Amsterdam	501AMS	St. Petersburg	319STP	skippund	3 1/2	allun	3360	1-feb	18		
238937	12	Amsterdam	501AMS	Friderichshavn	041FRS	Skippund	2-mrt	Allun	3360		8		
164918	8	Amsterdam	501AMS	St. Petersburg	319STP	skippund	32	allun	3360	8			
239159	4	Stockholm	221STC	Liorno	843LII	Skippund	11	Allun	3360				
238406	4	Stockholm	221STC	Rouan	869ROU	Skippund	85	Allun	3360	21	12		
236036	4	Stockholm	221STC	Venedig	852VEN	Skippund	58	Allun	3360				
237657	4	Stockholm	221STC	Kongels	279KUN	Skippund	1	Allun	3360		12		
236036	5	Stockholm	221STC	Venedig	852VEN	Lispund	13	Allun	3360	14 1/2	8		
165743	11	Amsterdam	501AMS	Stolpemünde	449STL	skippund	1	allun	3360		12		
166468	8	Amsterdam	501AMS	Stettin	451STT	skippund	1-jun	allun	3360		2		
238804	7	Amsterdam	501AMS	Friderickshaun	041FRS	Skippund	2-mrt	Allun	3360	8			
240197	13	Amsterdam	501AMS	Stettin	451STT	Skippund	1-feb	Allun	3360		6		
154504	7	Hamborg	701HAU	Stettin	451STT	skippund	3 2/3	allun	3360	1-feb	20		
236963	11	Amsterdam	501AMS	Stockholm	221STC	Skippund		Allun	3360		12		
165930	7	Bette og Marse	832CET	Kiobenhaun	001KOE	skippund	jan-15	allun	3360		1		
161582	8	Amsterdam	501AMS	St. Petersburg	319STP	skippund	1 3/5	allun	3360		20		
244036	7	Amsterdam	501AMS	Habsahl		Skippund	1-mrt	Allun	3360		4		
160133	12	Amsterdam	501AMS	St. Petersburg	319STP	skippund	5 1/2	allun	3360	1	18		
220125	9	Marseille	831MRS	Stockholm	221STC	Skippund	1 3/4	Allun	3360		21		
217784	6	Malmøe	245MAM	Falckenberg	262FAL	Skippund	10	Allun	3360		6		
223486	3	Norrköping og S	233NOK	Rouen	809ROU	Skippund	2	Allun	3360				
223486	4	Norrköping og S	233NOK	Rouen	809ROU	Lispund	8	Allun	3360	1-feb	5		
218679	6	Hamborg	701HAU	St. Petersburg	319STP	Skippund	3	Allun	3360	1-feb	12		
187986	3	Calmer	234KAM	Bremen	721BRM	skippund	6	allun	3360	1 1/2			
214341	4	London	632LON	St.Petersborg	319STP	Skippund	38 1/6	Allun	3360	9 1/2	2		
179642	1	Leith	608LEI	Dantzig	421DAZ	skippund	7 1/2	allun	3360	1 1/2	18		

Results (2)

- French imports in the BdC, not in the Sund
 - 57% of value, 66% weight, 76% volume, 1% count (incl. wood)
 - oar, salted beef, butter, Prussian blue, beer, tar, fish, ashes, charcoal, candles, fish glue, cotton, cords, leather, copper, pewter, rosacea, horse hair, iron, cheese, barrels, seeds, fish, oil, wool, lard, vegetables, linen, mast, cod, skin, pepper, lead, feathers, tea, tallow, linen cloths, sails, brisle
 - Wood classification is much rougher in the Sund
- French imports in the Sund, not the BdC
 - Barley and tobacco
- Explanations ?
 - War ? 1780 is probably not a good year...
 - A number of these look like English goods ?
 - Errors ? Where is all the wine gone ?
 - Denmark/ Norway (without Denmark : “down” from 62% to 59% for exports, a bit up for imports)

Results (3) - imports

Goods	Sund	BdC	Explanation?
Steel	5.5 T	296 T	Coming from Sweden and the North. Through Norway?
Alum	84.5 T	132 T	
Hemp	2,381 T	1,927 T	
Wax	14 T	187 T	
Wheat	220,000 litres	2,220 T	Mostly from Russia
Linen seeds	73,000 litres	44 T	
Wool	43 T	592 T	
Linen	7 T	7 T	
Merrains ?			
Barley	6 T	0	
Planks	2,240	823,000	Only "planches de sapin"
Potash	13.5 T	220 T	
Sail cloth	110 pieces	13.7 km	

Results (4) - exports

Goods	Sund	BdC	Explanation?
Almonds	45.5 T	254 T	
Citrus	100,000 liters	164 T	
Cotton (all kind)	1 T	42 T	
Fruits	471 T +158,000 litres	5,500 T 57,000 litres	
Oil	16,500 litres + some value	148 T	
Pepper	300 kg	1,500 kg	
Rice	99 kg	427 T	
Safran	110 kg	1,800 kg	
Soap	25 T	170 T	
Sugar	3,700 T	5,800 T	
Tobacco	24 T	154 T	
Terebentine	11 T	21 T	
Verdigri	8.5 T	96 T	

Conclusion

- What have we done?
 - Presented the Balance du Commerce
 - The techniques of comparing them
 - Results
- So?
 - Well, the differences are huge
 - The Sund includes many less goods than the BdC
 - For goods included by both, often differences by an order of magnitude
- What can be done?
 - More research (obviously)
 - War year?
 - Re-exports?
 - Mistakes in both databases?
 - The values and quantities are suspect in the BdC : sometime, simple a ratio of 1 to 1, 1 to 2 or 1 to 10... probably not real prices
 - But the quantities should be better
- Post scriptum (post-presentation)
 - Main issue : missing “sund codes” for goods in the Access database. 3/4th of the passages are not included in this work because of that

measure	amount	cargo-french	PLACES_STAN	PLACES_STAN	year	sontcode	cargo
pund	143034	sucre	France	Poland	1780	1720	sukker
pund	14324		France	Poland	1780		caffeebønner
Pund	1437		France	Poland	1780		Caffebønner
pund	144		France	Germany	1780		caffeebønner
Pund	14500	quetsches	France	Germany	1780	1250	Svedsker
pund	145000	quetsches	France	Russia	1780	1250	Svedsker
pund	1458		France	Germany	1780		caffeebønner
pund	1477	coton	France	Sweden	1780	1720	Sukker
pund	147953	sucre	France	Russia	1780	1720	Sukker
pund	1480		France	Poland	1780		caffeebønner
pund	14800	quetsches	France	Sweden	1780	1250	Svedsker
pund	1488	indigo	France	Denmark	1780	9240	indigo
Pund	149102		France	Poland	1780		Sukker et .
pund	150		France	Latvia	1780		pryneller
Pund	150		France	Poland	1780		Pryneller
Pund	150		France	Poland	1780		Prynnelect.
pund	150		France	Russia	1780		caffeebønner
pund	150		France	Russia	1780		Pryneller
Pund	1500	quetsches	France	Poland	1780	1250	Svedsker
pund	152	indigo	France	Poland	1780	9240	indigo
pund	1522	amandes	France	Poland	1780	1180	mandler
pund	15562		France	Germany	1780		caffee bønner
pund	15783		France	Poland	1780		caffeebønner
pund	158700	tabac	Poland	France	1780	2920	tobak
Pund	160	indigo	France	Poland	1780	9240	indigo
pund	1600		France	Russia	1780		orlean
pund	16389	quetsches	France	Sweden	1780	1250	svedsker
pund	164	tabac	Latvia	France	1780	2920	tobak
pund	1642	indigo	France	Russia	1780	9240	indigo
pund	1643	amandes	France	Germany	1780	1180	mandler
Pund	170		France	Poland	1780		Caffebønner
pund	170		France	Russia	1780		caffee bønner
pund	1700	amandes	France	Denmark	1780	1180	mandler
pund	1702	indigo	France	Russia	1780	9240	indigo
pund	174040		France	Poland	1780		raae sukker
pund	1776	indigo	France	Russia	1780	9240	indigo
pund	1780	indigo	France	Russia	1780	9240	indigo
pund	18	safran	France	Denmark	1780	2200	safran
pund	180		France	Sweden	1780		caffee bønner
pund	180	indigo	France	Denmark	1780	9240	indigo
pund	18275	amandes	France	Poland	1780	1180	mandler
pund	1840	vert-de-gris	France	Russia	1780	9310	Spanskgrønt
pund	1843		France	Denmark	1780		caffbønner
pund	1880		France	Poland	1780		Spansk grønt
pund	1885	amandes	France	Sweden	1780	1180	mandler
pund	19087	savon	France	Denmark	1780	9400	sæbe
pund	19100		France	Germany	1780		riis
pund	191718	sucre	France	Poland	1780	1720	sukker
pund	192661	sucre	France	Poland	1780	1720	sukker
pund	193	rhus	France	Denmark	1780	4840	sumak