



Metric problems in determining early-modern overland trade volume

The digitisation of the Görlitz toll register (1606–1641)

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Digital Research in Economic History*

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Merchants. Objects. Routes (1350–1600)*



Focus

- **Toll / customs register of the city of Görlitz in Upper Lusatia is surviving in the archives of the town council; booklets begin in 1606, and run – without gap – from 1628 onward until 1830**
- **Register informs about all merchandise traffic between Saxony, Thuringia, Bohemia and the western regions of the Holy Roman Empire with Silesia and Poland running through Görlitz**
- **Outline of a planned project to index the early years of this serial source and to make the data available for economic history**

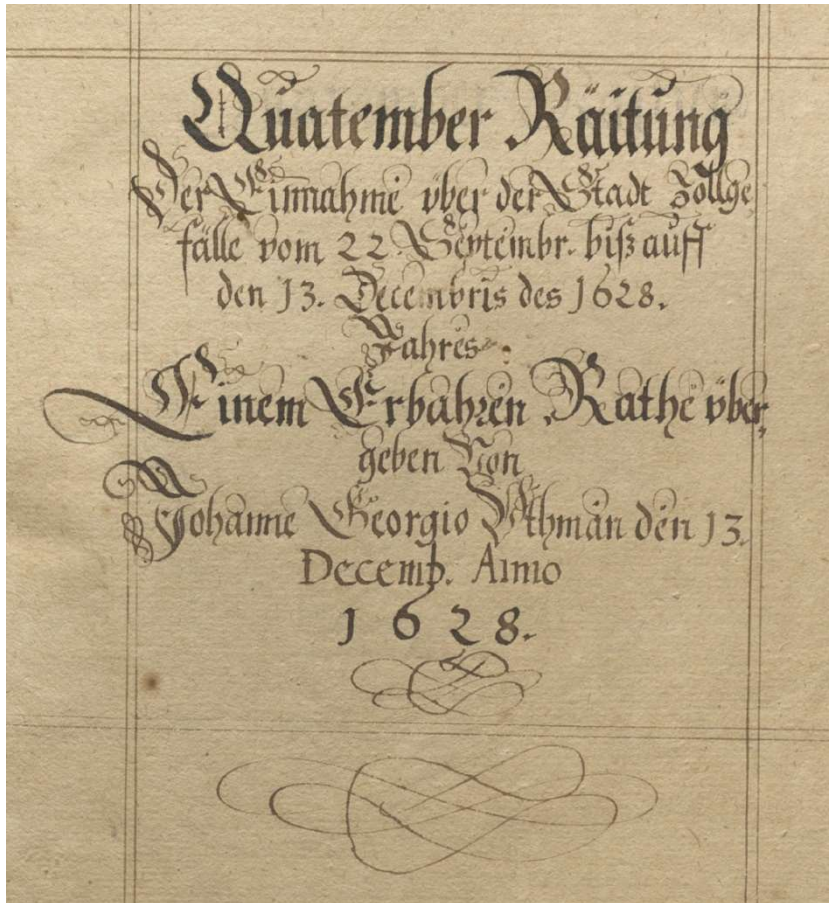
Questions

- **How is the Görlitz toll register organised?**
- **Against which historical background this register has evolved?**
- **Which topics could be analysed using these registers?**
- **What are the challenges in the digitisation of this source?**

Tradition and structure of the Görlitz toll register

- Customs revenues were recorded in monthly and quarterly accounts (*Quatember Raitung*, *Viertel Jährige Raitung*), and in audited accounts and counter calculations (*Gegen Raitung*)
- Monthly accounts have been preserved for 1606, 1609, 1612–13, 1615–17, 1624–25, and from May / June 1628 without gap until 1830; quarterly and check accounts have survived since mid-1628
- Entries include the date, the name of the customs' payer, his place of origin, the number of carts, the volume and denomination of goods, the tariff rate and the amount of payed customs
- In later counter calculations only the amount of payed customs is recorded, without reiterating all the other information
- All this gives basic information about the Görlitz revenues from merchandise traffic and the frequency, scope and actors of the trade on the *Via Regia* between Saxony, Silesia and Poland

Example of a quarterly customs account



Anno 1628.
SEPTEMBER. Ealz. ang. Sch.

Einnahm der Zollgefälle.

22	Vorzollt Kunst Defolt 4. Schindeln bereit fuch.	—	5	4
22	Vorzollt worden 2. Defortinn.	—	—	8
22	Vorzollt worden 1. Defort liden.	—	—	2
22	Vorzollt Haupt Defolt von Droschaw 875. foln von Defort.	36	11	—
22	Vorzollt Haupt Defolt der Jungern von Droschaw 227. folnige Defort.	9	7	—
22	Vorzollt Haupt Defort von Lwarden 726. foln von Defort.	30	6	—
22	Vorzollt Adam Mayner von Lwarden auff 3. Wagen 26. Maß Weid, Item 15. Luchter Blitt.	1	12	—
22	Vorzollt Walther Dohrsall auff 2. Wagen 30. Maß von Bley.	—	20	—
22	Vorzollt Haupt Defort von den Lingen auff 1. Wagen 10. Maß Weid.	—	10	—
22	Vorzollt Dohrsall halber 2. Wagen Dohrsall mit 7. Pferd.	—	7	—
22	Vorzollt Haupt Defort 2. Defort Alen Defort. tt.	—	—	8
23	Vorzollt worden 1. Defort Mittel Defort.	—	—	6
23	Vorzollt worden auff 1. Wagenen halber Lading Dohrsall mit 2. Pferd.	—	1	—
23	Vorzollt worden 2. Pferde an 1. Wagen, darauff von Droschaw zu Morditt geführet worden.	—	2	—
23	Diese Haupt vorzollt worden 100. Defort Droschaw.	1	9	4
Latus.		80	20	8

Front page of the quarterly customs account for the period from 22 September to 13 December, 1628 [left], and the first page of the booklet [right] (which contains 44 pages in total). Source: Ratsarchiv Görlitz, Alte Zollakten.

Example of a quarterly counter calculation

 Beginn Raitunges über die einnahme
 der Zoll gesellen, den Stadt Zoll
 betreffende, vom 22 Septembr.
 bis zu dem 12 Decembr: inclusive,
 des 1628 Jahres.

Anno 1628		fl	sch	gr
Den 22 Septemb: sindt besoffel worden				
Haupt Stadell 2 fochlein 1000				8
Adam Mayerschen Leinwand 3 wag 26 Maß				
Mitt: item 15 Cent: gutt		11	2	
Dalbhauser Wäcker 2 wag 10 Maß mit 7 pferden			7	
Haupt Leinwand von der Leinwand auf 10 wag 10 Maß				10
Item 2 Dubsina				8
Item 10 Maß + 1000				5
Mehlsack Dohlsack von Leinwand auf 2 wag 30				
Cent: glade				20
Haupt Dohlsack von Leinwand 875 1/2 Maß	30	11		
Item besoffel worden 1 garladen				2
Haupt Dohlsack von Leinwand 2 3/4 Maß				9
Haupt Dohlsack von Leinwand 7 1/2 Maß				30
Den 23 Septemb: besoffel worden				
1 Wäcker fallbladen 100 Maß 2 Maß				1
2 fochlein an einem wagen darauß 10 wag 10 Maß				
in mancher gegen sich worden				2
1 fochlein mittel 1000				20
Dieser wäcker besoffel worden 100 Maß 10 Maß				9
besoffel worden 5 Maß 10 Maß 10 Maß				5
besoffel worden 8 Maß 10 Maß				2
Latus H		8	1	8

Front page of the quarterly check account for the period from 22 September to 13 December, 1628 [left] and first page of the booklet [right] (which contains 28 pages in total). Source: Ratsarchiv Görlitz, Alte Zollakten.

Historical background

[...] From time immemorial the city [of Görlitz] had the right to levy a duty on individual goods brought into or even only through the city. [...]

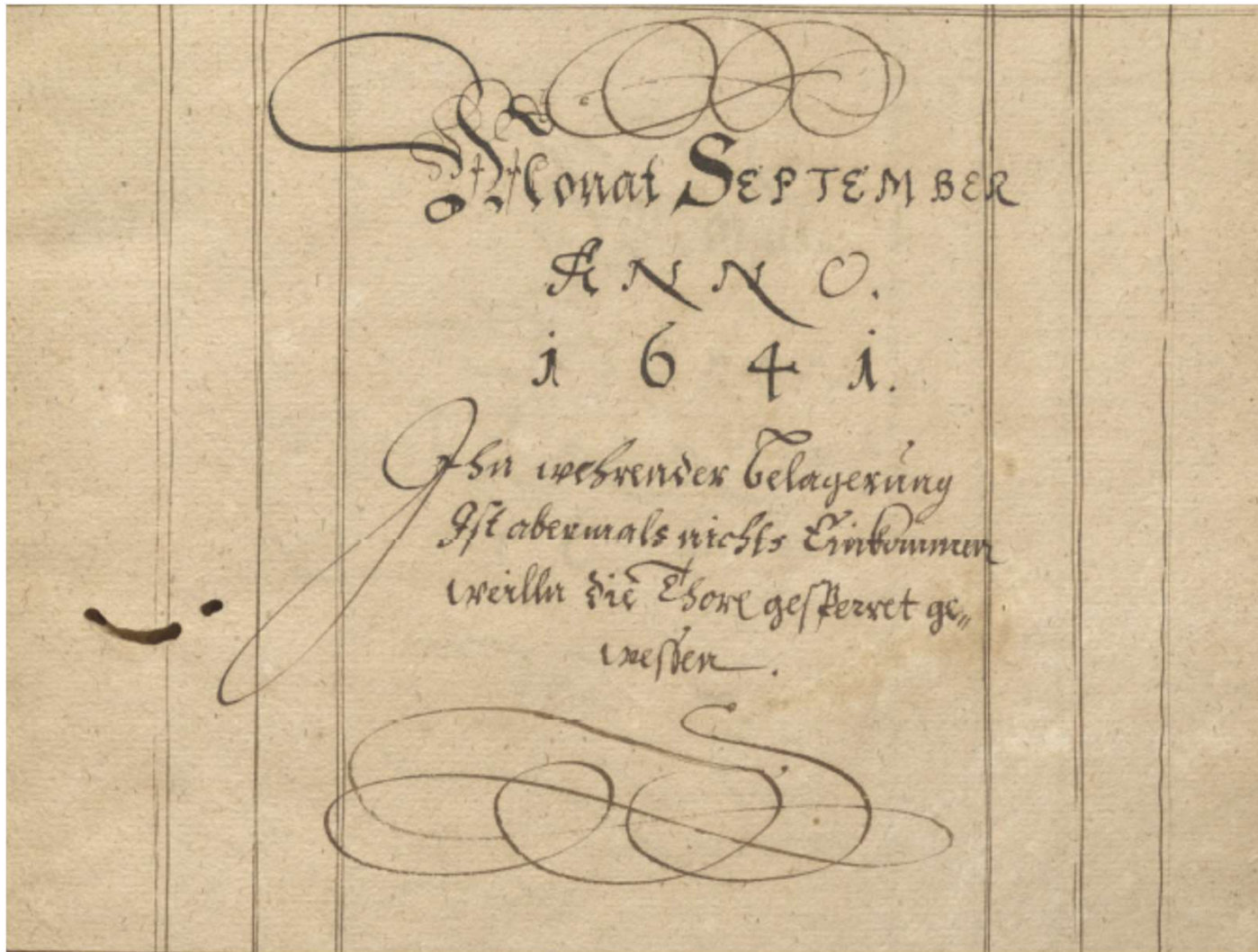
English translation, cited from: Quellen zur Geschichte der Stadt Görlitz bis 1600. Im Auftrage des Görlitzer Magistrats hg. von Prof. Fr. R. Jecht, Görlitz 1909, 146.

- **Customs were granted to the city of Görlitz in 1321, and the sovereign, King John of Bohemia, confirmed all privileges in 1329**
- **1329/30 market and mint regalia, salt staple, exemption from duties all across Bohemia; 1329 staple rights for dyer's weed**
- **Görlitz became a crown demesne in 1547; Görlitz's claim to be thus able to transport goods from and to Wroclaw duty-free initiated a dispute with the city of Wroclaw (1549–65)**
- **In 1623 Görlitz came as a pledge to the Elector of Saxony; since 1635 Upper Lusatia was a fief of the Bohemian crown to the Electorate; Swedish occupation of the town (1639–41); siege and capture by imperial troops in 1641**
- **Customs records contain privileges, ordinances etc., a toll record of 1597, e.g. (*ordentliches Verzeichnis der Zollgefälle anno 1597*)**

Potential research questions (I)

- Determination of volume and seasonality of overland trade with Silesia and Poland (for the 18th century see LUDWIG 1998)
- Challenges:
 - (a) Bypassing of the Görlitz customs and customs clearance in other towns of Upper Lusatia ⇒ Görlitz customs would have to be analysed together with these other customs
 - (b) Possibly major distortions of customs revenues caused by the campaigns of the Thirty Years' War
 - (c) Competition with Prussia over the importance of trade routes
- Addition to important customs registers of the early-modern period like the Sound toll register, the Danube customs at Aschach, or the Lower Rhine customs (*Schenkenschanze*)
- Problems of Metrology: Determination of measures and weights
- Opportunity to study the business cycle in Germany during the Thirty Years' War and to add to studies of market integration (FEDERICO/SCHULZE/VOLCKART 2021) and growth (PFISTER 2019)

Example of the impact of the Thirty Years' War



Front page of the September section within the quarterly account for the period from September to November 1641.
Source: Ratsarchiv Görlitz, Alte Zollakten.

Potential research questions (II)

- Reconstruction of at least part of the merchandise traffic to and from the Leipzig trade fairs
- Challenges:
 - (a) Customs records do not indicate at which gate goods were declared, i.e. the direction of trade cannot be clearly determined
 - (b) Goods are sometimes insufficiently specified
 - (c) Leipzig trade fairs are neither named explicitly as the origin nor as the destination of goods
- Trade operated via the Leipzig fairs could be estimated rather accurately – due to the importance of fairs for the exchange between East and West, the exclusiveness of the *Via Regia*, and the detailed specification of oxen trade going to Buttstädt
- On the basis of these data a reconstruction of the trade networks of merchants who visited the Leipzig trade fairs is barely impossible, since in the Görlitz toll register mainly waggoners are recorded as the payers of customs

Problems of Digitisation

- High resolution pictures from about 100 booklets of the early years (1606–41) of the Görlitz toll register are available
- Subject-Predicate-Object-Representation of information:
Person x declared an amount z of good y at a given date t and payed a custom in the amount of c
- How to store the data?
- Putting the information into an Excel-sheet would be straightforward, as the customs register itself is organised as a table with columns representing date, name, good, volume of good, tariff and customs amount, and rows representing the entries
- Storage in the existing CoMOR database is more complicated, but would allow data export for spatial analysis (by using a GIS) and network analysis (with social network analysis software)
- In both cases the original text of the records would be stored, which then becomes searchable

Conclusions

- **The Görlitz toll register would give a lot of valuable information about the volume and seasonality of trade between East and West, but has not yet been used systematically for determining trade and economic growth in the 17th century**
- **Even though the organisation of the register is rather systematic and highly sophisticated, the sheer number of entries is a major challenge for digitisation**
- **By making some plausible assumptions concerning both the specification of goods and the direction of trade, it should be possible to establish reasonable estimates of the volume of trade between East and West running via the fairs of Leipzig as well as of the impact of the Thirty Years' War on trade**