

Silver and Spices in the Runtinger Trade with Prague

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In the late medieval period, a prominent trade route led from Prague through Regensburg to Venice. Silver mined in the Bohemian hinterland was traded for luxury items from the Near East. The Regensburg merchant house of Runtinger made vast profits by buying cloth and luxuries cheaply in Venice—in particular spices from India—and selling them in exchange for comparatively large quantities of silver in Prague. This study treats their ledger, *Das Runtingerbuch* (1383–1407), as a case study for an analysis of the Prague economy. The Runtingers sold the same types of spices and cloth in Regensburg and in Prague during the same span of years, which makes it possible to use their records as sources with which to compare the two markets. The Runtingers are shown to have market power in the Prague spice market but no market power in the Prague cloth market or the Regensburg markets. The reasons for these market differences are theorized in reference to the socioeconomic positions of the Regensburg and Bohemian elites. Luxury items were traded for silver or silver coins, constituting a continuous drain of silver from Bohemia towards Regensburg, which led to a degree of stagnation in the local economy in Bohemia.

Keywords: Runtingers, *Das Runtingerbuch*, silver, spices, long-distance trade

Introduction

“In Bohemia, a pig eats more saffron in a year than a German in his whole life,” notes a German chronicler.¹ Trivial as this contention may seem, to understand this Bohemian taste for Eastern spices, one must grasp a complex web of trade routes and the shifting interests of those who desired, sought, and sold these luxury items and got rich along the way. The Bohemian taste for Indian spices underscores the character of European economy and European society. It also offers a perspective from which to study the evolution of this economy and this society. Bohemia was in many ways an obscure and ignored corner of medieval Europe. Connected to the surrounding lands only by dangerous roads through dense forests and bypassed by the main thoroughfares of trade, it was ruled by a lesser-known local dynasty. Bohemia remained largely ignored in the early medieval period. With the discovery of silver in the thirteenth century, much

1 Eikenburg, “Das Handelshaus der Runtinger zu Regensburg,” 130.

changed. Bohemia was thrust into an important role in the European economy, which came to rely heavily on Central European silver for coins. Demand for silver was particularly strong in the city-states of northern Italy, which maintained an unfavorable trade balance all over the Mediterranean. Meanwhile, suddenly acquired wealth caused sudden demand in Bohemia for Mediterranean luxuries. South German merchants took advantage of geography to become middlemen and make a handsome profit.

The impact of Bohemian silver on the rest of Europe has been well explained,² but what of the effect of Europe on Bohemia? Only vague answers have been given to this question, in part because Bohemian traders left only three fragments of their records behind.³ Thankfully, their south German counterparts were somewhat more thorough. Few ledgers have survived,⁴ but *Das Runtingerbuch* contains surprisingly complete information about Bohemia over a relatively wide timespan. Based on the available sources, it also can be said to offer an adequately detailed record of contemporary Regensburg long-distance trade during the period in question.⁵ This makes it useful material for a case study. The Runtinger family of Regensburg emerged as merchants in the late 1300s and early 1400s. *Das Runtingerbuch* records the years between 1383 and 1407. Runtinger activities varied widely. They operated a mint, held public office in Regensburg, and dealt in Flemish cloth.⁶ They also traded with Bohemia and Venice. Although this ledger has been thoroughly studied as a source on economic and civic life in southern Germany, it has not been extensively used to analyze the Bohemian economy.

This article focuses on spices for many reasons: they were the most profitable item sold; they can be easily divided into subgroups, such as pepper, ginger, and cloves; they were bought and sold frequently; and they were sold both in Regensburg and in Prague. In other words, quantitative data on the same commodities are available for comparison across different years and different markets. Furthermore, spices not only position Bohemia in a much wider network of trade, but as exotic luxury items, their purchase offers an indication of the prosperity of the customers in a given year. All this raises the following

2 See Spufford's book *Money and its Use in Medieval Europe*.

3 These were published by Frantisek Graus in 1956, and one was published more recently by Musilek. Musilek, "Zlomek knihy vydání, v níž jsou jména Židů," 141.

4 Graus, "Die Handelsbeziehungen Böhmens," 100.

5 Fischer, *Regensburger Hochfinanz*, 140, 161.

6 Eikenburg, *Das Handelshaus der Runtinger zu Regensburg*, 88, 97.

questions: why were spices the most profitable part of the Runtinger trade with Prague? And what implications did this trade have for Prague and the greater Bohemian economy?

Silver and Spices in Bohemia and Venice

Before grappling with the ledger of a single company threading its way across a continent of jostling competitors, it is worth taking a moment to recall the established economic patterns within which the Runtingers acted. Both Central European silver and the Venetian spice trade affected Europe's economy in fascinatingly profound ways; they not only bound geographically distant societies together by shared—if not always equal—interests, they were also catalysts for change within these societies over time.

Silver was discovered in several sites in Central Europe, first in Freiberg in Meissen in 1168, then in Jihlava around 1230s,⁷ and in Kutná Hora in the 1280s.⁸ The volume of output in Bohemia reached ten tons a year towards the end of the thirteenth century and 20 tons in the first half of the fourteenth.⁹ Some of this was used to make coins. Around 1300, more than six tons of coins were minted annually in Kutna Hora, which was the most prolific of these mines. Gold was also discovered in Banská Štiavnica, Slovakia, and in the early thirteenth century, these mines yielded around 600 kilograms a year.¹⁰ Later in the fourteenth century, more gold was mined in Kremnica.¹¹ Burgeoning mining towns, each in turn the largest in Central Europe, stimulated the whole economy by generating centers of demand.¹² Silver was also nearly the only serious Bohemian export. In the thirteenth century, wax and certain other regional products were exported. By the fourteenth century, few of these exports are mentioned in the sources.¹³ The wide availability of fabrics from the Low Countries also appears to have depressed the local industry in Bohemia.¹⁴ Thus, the overall tendency in Bohemia was to export raw materials in the form of precious metals and import finished products.

7 Spufford, *Money and its Use in Medieval Europe*, 109, 119, 124.

8 Bilek, *Kutnoborské dolování*.

9 Zaoral, "Silver and Glass," 285.

10 Spufford, *Money and its Use in Medieval Europe*, 123–24.

11 *Ibid.*, 268.

12 Spufford, *Power and Profit*, 372.

13 Graus, "Die Handelsbeziehungen Böhmens," 81, 83–84.

14 Spufford, *Money and its Use in Medieval Europe*, 340.

The wealthy elite in these areas naturally demanded all manner of luxurious paraphernalia. Spices certainly ranked high among them. Spices had a versatile and complex connotation, since they were used not only for cooking, but also as medicines and disease preventatives and in perfumes and as a liturgical incense. Spices were thought to promote the body's equilibrium and come from a mysterious paradise just west of the garden of Eden.¹⁵ With the connotation of spices as wondrous in many ways, their use became an expensive mark of class distinction, indicating gracious and sophisticated sensual pleasure.¹⁶ The medieval category of spices was comparatively vague and expansive. It included dates, raisins, rice, dried grapes, aromatic but inedible substances, dyestuffs such as alum, madder, and indigo, medical borax, aloes, and dried rhubarb from China. Nevertheless, by far the most common spices were pepper—which amounted to two-thirds of the Venetian culinary spice import¹⁷—cinnamon, ginger, and saffron. Nutmeg, cloves, and galangal were also widely used, but in smaller amounts.¹⁸ Spices such as pepper and ginger were grown on the western coasts of southern India and Sri Lanka.¹⁹ Saffron, by contrast, was cultivated in the Mediterranean, especially Tuscany. Its expense was connected to the labor required to harvest it. Each crocus contains only three stigma, which meant it took 70,000 flowers to produce one pound.²⁰

Although the spice trade had considerable cultural importance, it formed only a small fraction of total trade. Around 1400, Venice imported an estimated 500 or 1,000 tons a year.²¹ However, the extreme value of spices relative to their compact size meant that they dramatically impacted the balance of payments.²² While Europe imported thousands of ducats of goods from the east, far less in terms of value flowed in the other direction. The balance therefore had to be paid in coins. Table 1 indicates the balance of payments per year in the fifteenth century, as proposed by Peter Spufford with reference to Eliyahu Ashtor. A striking quantity of coins was paid eastward—net 370,000 Venetian ducats in coins on a total trade worth 660,000 ducats a year! This constituted an ongoing drain of Europe's silver supply, so that Europe became dependent on continuous

15 Freedman, *Out of the East*, 13–14.

16 Ibid, 46–47.

17 Spufford, *Power and Profit*, 310.

18 Freedman, *Out of the East*, 19–20.

19 Spufford, *Power and Profit*, 310.

20 Freedman, *Out of the East*, 134.

21 Spufford, *Power and Profit*, 310.

22 Lopez and Raymond, *Medieval Trade in the Mediterranean World*, 342.

mining to support trade, upon which much of the developed economy came to be built. Indeed, Spufford argues that when silver mines dried up and closed down in the 1440s, the economy of Europe ground to a halt on all levels by the 1460s, plunging into a depression which lasted as long as the bullion famine.²³

Regensburg, the Runtingers, and Their Ledger

During the late medieval period, expanded sea routes from Italy, the consequent decline of the Champagne fairs,²⁴ and the Central European boycott of Vienna conspired to give merchants from the Holy Roman Empire an expanded role in international trade. After the boycott of Vienna was codified in the 1335 treaty of Visegrád, Regensburg possessed a clear geographical advantage as a replacement intermediary between Prague and Venice. It was centrally located, and its vicinity to the Danube offered easy access to the Rhine.²⁵ Autumn and Eastertide fairs in Frankfurt-am-Main supplied merchants in the Holy Roman Empire with cloth from the Low Countries. There, the northerners brought their goods from Russia, Scandinavia, and England, and the southerners brought their goods from Spain.²⁶ Regensburgers sold wares from Frankfurt mostly in Vienna or Venice, while the Bohemian merchants found their own way west to Flanders and Brabant, competing fiercely enough to cause Holy Roman merchants to focus on exporting other items to Bohemia.²⁷

Regensburg rapidly became the most important city in Bohemian trade, developing earlier and stronger ties with Prague even than Nuremberg. Even before the treaty of Visegrád, trade appeared to be regular and varied. The following goods were confiscated from Regensburger merchants in Prague, presumably on account of customs infractions: In 1321, seven merchants: 189 rolls of fustian, seven from Ypern, one from Tornai, and 80 pieces of fine linen, two knives and 30 schock 19 groschen. The fustian seems to have been produced in Regensburg. In 1324, 16 merchants: eight sacks and 289 pounds of saffron, 102 pieces of fustian, 40 pieces of cloth from Ypern, a hook, three horses, eight flutes, two loads of coins, seven pairs of scales, two pieces of fine linen, three rolls of rough cloth, three colts, two barrels of Italian wine, three pieces of

23 Spufford, *Money and its Use in Medieval Europe*, 360.

24 Spufford, *Power and Profit*, 400–1.

25 Fischer, *Regensburger Hochfinanz*, 38.

26 *Ibid.*, 208.

27 Eikenburg, *Das Handelsbaus der Runtinger zu Regensburg*, 105–6.

white linen, a knife, a silver belt, and some cash.²⁸ Clearly, many merchants and a wide variety of goods were involved, and a great deal of money as well.

The importance of Regensburg merchants to Venice was codified by their position in the *Fondaco dei Tedeschi*. Prominent cities had rooms at their private disposal—the Regensburgers possessed one called *la volta di San Piro*²⁹—and all “German” cities had representatives at a common table, where the Regensburg coat of arms took the highest place.³⁰ Displeased, their rivals the Nurembergers³¹ tried to supersede by force in 1347–48.³² Because the Regensburgers owed their status as a free town partially to this position, they could not afford to lose. They dispatched merchants and money to the markets, buying more in a day than the Nurembergers could buy in a year. When the Nurembergers reprised the issue some years later, Matthäus Runtinger and Franz Pütreich of Regensburg beat them with sticks. The matter was brought before the Venetian doge, who, pressured by economic interests, granted the Regensburgers the highest place “forever.”³³

Matthäus’s role in this escapade hints at the Runtingers’ prominence in Regensburg. His father, Wilhelm Runtinger, married into the patriciate and rapidly rose to high public office. In 1388, he was appointed the *Fragger*, who took absolute control in times of war like a Roman dictator, as well as the *Kämmerer*, who saw to revenues, represented the mayor in his absence, and settled minor disputes during regular hours at the town hall. Wilhelm was also the head of taxation, the head of excise, and the bridge master.³⁴ Because long-distance trade and wine production were crucial to the town, many council members represented these occupations in the town council, including Wilhelm in 1383/84 and Matthäus in 1399.³⁵

While father and son formed the core of the Runtinger business, they also formed limited, temporary partnerships with their servants, pooling capital and sharing risks for specific purchases and then splitting the profit correspondingly after sale.³⁶ According to the Regensburg customs book of 1340–41, most or all

28 Graus, “Die Handelsbeziehungen Böhmens,” 97, 99–100.

29 Fischer, *Regensburger Hochfinanz*, 260.

30 Eikenburg, *Das Handelshaus der Runtinger zu Regensburg*, 70–71.

31 Stromer, “Nuremberg in the International Economics of the Middle Ages,” 211.

32 Fischer, *Regensburger Hochfinanz*, 261.

33 Eikenburg, *Das Handelshaus der Runtinger zu Regensburg*, 70.

34 Ibid., 23–25, 42–44.

35 Fischer, *Regensburger Hochfinanz*, 75, 78.

36 Denzel, *The Merchant Family*, 372–73.

of the 14 highest capital trading companies were family-based. Their economic activity was not limited to trade. The Runtingers held vineyards and Matthäus ran a mint for silver *Pfennige* along with its money exchange after 1392. They occupied a large house in which they lived, did administrative work, and stored goods.³⁷ Regensburg produced cotton cloth, and the Runtingers participated in its export. They also bought cloth from the Low Countries in Frankfurt and even sent servants to Brabant to buy it straight from the source. Such wares were purchased in exchange for cash for resale in Vienna.³⁸

Wilhelm hired servants for a salary, notably Ulrich Furtter, to stay in permanent premises in Prague for months at a time.³⁹ The wares sent to the Prague office were almost universally sold wholesale to regular clients, among them Poles and Silesians as well as Bohemians. While the former were likely middlemen, the latter were often grocers or apothecaries who sold to consumers, such as Friedrich of the Apothecary. Goods, therefore, would have been marked up again before the individuals intending to consume them bought them on the market. The more detailed record book of this outpost has not survived, but Furtter frequently returned with summaries, which were included in *Das Runtingerbuch*.⁴⁰

In volume one of his published edition, Franz Bastian summarized this data by calculating the original prices, travel costs, amounts sold, markups, and profits for the goods for different years. These figures are averages or sums derived from individual entries which usually contain smaller amounts of multiple goods, making patterns difficult to identify. For ease of comparison, these numbers are calculated in Venetian ducats and Venetian weights, although the Runtingers often had to exchange their money and often recorded figures in local weight and currency. I will be focusing on information relevant to trade with Venetian goods, taken from volumes I and II.

Interrogating Das Runtingerbuch

The main wares that Runtingers sold in Prague fall into two categories: spices and cloth. The Runtingers purchased some cloth, primarily wool, from the Low Countries. Other cloths, primarily fustian, were produced in Regensburg, and silk

37 Eikenburg, “Das Handelshaus der Runtinger zu Regensburg,” 52, 62–63.

38 Ibid., 88, 97.

39 Ibid., 102.

40 Ibid., 102, 108–10.

from the east was purchased in Venice. What made spices the most profitable commodities in the Runtinger trade with Prague? To answer this question, I first compare spices sold in Regensburg with spices sold in Prague. I then do the same for cloth. This analysis will show that spices yielded a higher and more stable level of profit than cloth on the Prague market, but not in Regensburg. Finally, I offer an interpretation of this trend based on the relevant scholarship.

Spices in Regensburg

The Runtingers traded primarily in pepper, saffron, cloves, and ginger, although they also purchased small amounts of spices such as anis, coriander, and sugar.⁴¹ Table two presents data on the four main spices. Unless otherwise stated, all data are calculated in Venetian ducats and Venetian weights. The Venetian pound (hereafter V.lb.) for spices was equal to 297.5 modern grams.⁴² The Runtingers were able to sell saffron in Regensburg at a 19.6 percent markup in 1383, but at a 13.8 percent markup only in 1400–1401—a 5.8 percent decrease. The profit decreased by the same percentage. The price the Runtingers paid in Venice decreased slightly and transportation-related expenses remained constant, so the reason for this change cannot have depended on the Venetian market. The price customers paid decreased from 2.48 to 2.45 ducats/V.lb, and sales increased by 40 percent. This shows that customers were extremely responsive to a small reduction in price. Here we see that when the Runtingers sold at a lower markup, they made less profit as well.

Pepper was sold in 1383, 1400–1401, and 1403–1404. Markup steadily rose, but profitability dipped between 1383 and 1400–1401. This dip can be explained by a 3 percent increase in transportation expenses and an increase in prices on the Venetian market. Hoping that prices would continue to rise in Regensburg, the Runtingers held back the remaining pepper from that lot,⁴³ selling it off at a 27 percent profit and thus creating a 50 percent increase in profits. When the price rose, customers bought less. Ginger appears to have been comparatively unimportant, as in Regensburg it was only sold once, in 1400, in a relatively small amount at a profit of only 9.25 percent. While cloves were sold in Prague, they are not mentioned in any of the sources related to Regensburg.

41 *Das Runtingerbuch*, vol. 2, 112–13.

42 Eikenburg, “Das Handelshaus der Runtinger zu Regensburg,” 289.

43 *Das Runtingerbuch*, vol. 1, 626.

To summarize, the Regensburg market responded keenly to price changes in both directions. When prices fell, customers bought more, and when they rose, customers purchased less. Furthermore, we can already deduce that the Runtingers scrutinized the market. When they noticed profits decreasing, they sold. When market prices rose, they held back in hopes of selling for a greater profit later on. In other words, the Runtingers had no market power in Regensburg, and they used spices for speculation.

Spices in Prague

In Prague, in contrast, spices were sold with comparative regularity between 1395 and 1404. Transportation expenses remained constant during this period. For all spices except saffron, markup, prices, and profit remained relatively stable. As shown in table three, between 1395 and 1401, both the amount of saffron sold and the markup varied noticeably. The price of saffron in Venice rose from 1.54 Venetian ducats per pound to 2.54 ducats in 1399, a 54 percent increase. Nevertheless, the Runtingers managed to increase their Prague sale price by 62 percent and the amount that they sold only fell by 22 percent. In contrast, by 1401, the price of saffron in Venice had fallen by 15 percent from its 1399 price. The Runtingers decreased their Prague sale price by 14 percent and sold 16 percent more. This shows that saffron customers were more responsive to a decreased price but less responsive to a price increase. This indicates high demand at every price and a relatively gently sloping demand curve. If the demand curve were steeper, we would expect to see a change in the amount sold inversely proportional to change in price. When the good becomes 40 percent more expensive, for example, 40 percent less is sold, and when the good becomes 40 percent cheaper, sales increase by 40 percent. Note that in spite of these fluctuations, profit remained nearly steady at 20 percent.

If we consider these data against the backdrop of the high and stable profitability of other spices during this time, we can conclude that the demand for spices in Prague was very high and stable over time. The fact that the Runtingers could substantially increase their prices without sacrificing much profit suggests that they possessed some measure of market power.

The Roll of Spices

Spices were overall more than twice as profitable in Prague as in Regensburg—with the exception of the speculation with pepper in Regensburg in 1403–04, when pepper returned a 27 percent profit in Regensburg and a 42.5 percent profit in Prague. Even that is a very considerable difference. Ginger was somewhat less profitable in Prague, but it was traded in comparatively small amounts and seems to have played a minor role in the Runtingers' trade overall. The average profitability of all spices in Regensburg was 16.83 percent, while in Prague it was 25.51 percent. Since profit margins usually ranged from 10–20 percent during the period in question,⁴⁴ the profits made in Prague were extraordinarily high.

In terms of amount, we see similar amounts of saffron and ginger sold on both markets, but a startling difference in pepper and cloves. A moderate amount of cloves was sold in Prague for a 30.7 percent profit, but none was sold in Regensburg. Most striking of all, between 1395 and 1404, the Runtingers sold 3,219.24 V.lb. of pepper in Regensburg, compared with only 63.75 V.lb. in Prague. In modern kilograms, that is equivalent to 957.72 kg in Regensburg, compared with only 18.97 kg in Prague.⁴⁵

Thus, it is evident that spices played a different role in Prague than in Regensburg. In Regensburg, the market responded elastically to price changes, while in Prague, demand was very high even when prices rose. While in Regensburg we see the Runtingers acting as price takers, waiting for the market to change to get a better price, in Prague we see them acting as price makers to a certain extent. In other words, they were able to raise the price without substantially affecting overall profits.

The Role of Cloth

The Runtingers traded in many types of cloth including silks and raw cotton from Venice, fustians produced in Regensburg, and wool from Flanders. The Runtingers seemed to have used cotton as a packing material while transporting goods from Venice.⁴⁶ It was only rarely sold for money. In 1383, 43.2 Venetian

44 Gilomen, "Die ökonomischen Grundlagen des Kredits," 153.

45 Superficially, it would seem that there was an inverse relationship between amount sold and profit, but after a more detailed analysis of the sale of individual spices diachronically and across both markets, this relationship breaks down. These discrepancies involved more nuanced factors.

46 *Das Runtingerbuch*, vol. 2, 627.

pounds were sold in Regensburg at 22.5 percent profit.⁴⁷ In Prague, some cotton was sold at a loss in 1399, after it had served as packing material twice.⁴⁸ Instead, the cotton was mainly part of their fustian trade.

In 1400, the Runtingers dealt with eight Fustian weavers. The following is a typical example of their arrangement:

.E Charpf parichantter.

.E Item dez mitichen von Laurenti chaufft der alt Charpf von mir 3 zentnen pawmwooll, je 1 zentnen umb 11 parichant richtten auf weichnachten schirst. (Aug. 4)

a L Item mir gab der Charpf parchanter 32 parchant dez pfingtztags vor weinachten. – Er pleib mir ain virtail ains parchant noch schuldig.⁴⁹ (Dez. 23.)

In their dealings with all eight weavers, the Runtingers bartered cotton at one zentner—51 modern kilograms⁵⁰—for 11 “fustians,” or 18-meter lengths of cloth, to be delivered by a date which had been agreed upon. The Runtingers exchanged a total of 17 zentners and 612 Venetian pounds of cotton for approximately 222 fustians.⁵¹ Most of these were sent to Prague and sold in 1401–02, as summarized in table four. Transportation costs rose while the price in Prague decreased, leading to a drastic decline in profit. Here, we see a fluctuating price on the Prague market and the Runtingers acting as price takers. While the Runtingers traded in wool from Flanders, they never attempted to sell it in Prague. The Runtingers also sold silk bought in Venice. These silks came in many types and from many places. The following excerpt from April 29, 1383 details silks bought in Venice and shows just how varied this trade was:

. R Venedig.

.R Item ich chaufft ze Venedig 5 atlas umb 60 Tukat: gron, satgrab, plab, sborc, prawn.

.R Item und 5 samat umb 224 Tukat: 2 sbarcz, 1 prawn, 1 gron, 1 plab.

.R Item 16 Pfund 2 uncz ze 4 ½ Tukat: 72 ½ Tukat 1 ½ g., grab, leichtplab, satplab, prawn, sborc, weis, gron d R seid.

47 Ibid., vol. 1, 627.

48 Ibid., vol. 1, 640.

49 *Das Runtingerbuch*, vol. 1,150. Translation: Item On the Wednesday of Laurenti, Karpf the elder bought three Zentner of cotton from me, each zentner for 11 fustians, to be delivered by Christmas. Item Karpf the fustian weaver gave me 32 fustians on the Tuesday before Christmas. He still owes me a quarter of a fustian.

50 Eikenburg, *Das Handelsbaus der Runtinger zu Regensburg*, 289.

51 *Das Runtingerbuch*, vol. 2,150–51.

.R Item 6 Pfund ziegelvar seid ze 5 ½ Tukat suma 32 Tukat.

.R Item 6 walikin ze 12 Tukat, suma 72 Tukat, 2 gron auf prawnem podem, 2 prawn in prawn, 2 weis in weis.

.R Item 6 tuch von Tomask ze 18 Tukat, sum 108 Tukat; 2 prawn, 2 gron, 2 sbarcz. Er gab mir 2 Pfund Chreichisch seid in den chauf.

.R Item 5 pfund Chreichisch seid ze 30 g., suma 6 ¼ Tukat. Da sin(d) dy anderen 2 pfund pey.^{52 53}

The different types and weights of silk have already been analyzed elsewhere.⁵⁴ It suffices here to note the great variety of silks from the perspectives of type, quality, and price. Silk was sold both finished and unfinished, but always by length, not tailored. Silk sold in Prague in 1383 is displayed in table five. Four types of luxury silks were sold with an average profitability of 26 percent, compared with a 25.51 percent average profit on spices in Prague in 1395–1404.

The popularity of silk was apparently short-lived. In 1383, six of twelve bundles of unfinished silk from Bologna were sold in Regensburg at a 25 percent markup and 20 percent profit. The rest was sent to Prague, where it sat unsold for four years before being sent back to Regensburg. Osana, a clerk who worked in the Runtinger's shop, managed to sell a piece of it in 1405 for cash. The rest she sold against credit at a 3.3 percent markup the following year.⁵⁵

Likewise, finished silks were sold in Regensburg in 1400 for a 13.2 percent markup, which returned somewhat more than a 12 percent profit. The rest was sent to Prague. Half a pound was sold in Breslau along the way, and nearly 2.5 pounds were sold in Prague for a 20 percent markup, but the rest was immediately sent back to Regensburg. Once again, Osana sold it in small amounts in 1404. She brought in an average of 23 percent markup and a 20.5 percent profit.

52 Ibid., vol. 2,44–45.

53 Translation:

Item: In Venice, I bought five atlas silks for 60 ducats: green, deep gray, blue, black, brown.

Item: and five sammats for 224 ducats: 2 black, 1 brown, 1 green, 1 blue.

Item: 16 pounds two ounces for 4½ ducats: 72½ ducats 1½ g. gray, light blue, deep blue, brown, black, white, green silk.

Item: six pounds brick colored silk, for 5½ ducats, 32 ducats total.

Item: six Bagdad silks for 18 ducats each, total 108 ducats; two brown, two green, two black. He gave me two pounds of Greek silk with the purchase.

Item: five pounds Greek silk for 30 g., total 6¼ ducats. This includes the other two pounds.

54 Cf. Eikenburg, *Das Handelshaus der Runtinger zu Regensburg*, 120–24.

55 *Das Runtingerbuch*, vol. 1, 628–29.

A Comparison of Prague and Regensburg

Table six offers a comparison of the average profitability of all goods. Several clear conclusions can be drawn. Spices were much more profitable in Prague than in Regensburg. The Regensburg market for spices and the Regensburg market for other goods were not markedly different. In Prague, the market for spices was quite stable, while the market for cloth was volatile. The Runtingers could therefore depend on a higher profit for spices in Prague than in Regensburg, while selling cloth in Prague was a risk which did not always pay off.

Regensburg owed its prominence, if not its existence, to the intersection of two major trade routes at its location. Regensburg was primarily invested in transit trade. Its merchants depended on remaining efficient and profitable middlemen by staying well-informed about which goods were on offer and which goods were in demand at markets across various geographical areas.⁵⁶ A wide variety of goods from a wide variety of places regularly passed through Regensburg. The Runtingers were by no means the only merchants to bring wares from Venice. Klaus Fischer mentions Konrad Dürrenstetter, Stephan Notangst, Heinrich Altmann, and Jakob Ingolstetter alongside Matthäus Runtinger in the *Kämmerrat* as representative of Venice-Regensburg-Prague trade in 1383.⁵⁷ Thus, it is easy to understand why the Runtingers did not appear to possess market power in Regensburg: numerous suppliers meant fierce competition. Therefore, the Runtingers sold comparatively larger amounts for a comparatively smaller markup and profit but at lower risk to themselves (as opposed to the risk incurred by transport to Prague). They even occasionally profited from a favorable change in market price, as with their sale of pepper in 1400–1401.

The situation in Prague was considerably more complex. The cloth market in Prague could be divided by social strata: inexpensive, low-status cloth for daily use and luxury cloth designed to indicate elevated social position. The Runtinger trade in fustian falls into the former category. While the Bohemian textile industry was not known for export even into the sixteenth century, some domestic production for the immediate hinterland did exist, so the Bohemians had substitutes when fustian became especially expensive. Silks from Venice and wool from the Low Countries, on the other hand, were luxury items. Although the Runtingers acquired such wool in Brabant and Frankfurt, they never attempted

⁵⁶ Fischer, *Regensburger Hochfinanz*, 59.

⁵⁷ *Ibid.*, 76–77.

to sell it in Prague. This is likely because Bohemian merchants already imported wool from Brussels, Tournai, Ghent, Lowen, and Ypern.⁵⁸

Spices, however, have no substitutes. Except for limited amounts of saffron, they cannot be grown in Europe, and after the 1335 treaty of Visegrad, Regensburg surely had a strong hand in Bohemian trade with Venice. This is not to claim that they were without competitors; Nuremburg fought them,⁵⁹ as did others. However, Prague lay outside the network of banks, so everything was paid in silver,⁶⁰ which discouraged merchants from selling large amounts of the precious spices at once, as this would have forced them to transport large quantities of silver. Political instability in Bohemia also led the Runtingers to close their permanent branch in 1389.⁶¹ This explains the 195 kilograms of spice sold in Prague, compared with 2,155.5 kilograms in Regensburg, much as it also explains why the Runtingers were careful not to transport more than 2,000 gulden at once.⁶² Competition and caution thus combined to limit the supply of spices in Bohemia, and the Runtingers could demand much higher prices in Prague than in Regensburg.

Another factor allowed the Runtingers to charge more for spices in Prague: customers in Prague could pay more. Regensburg was home to merchants and craftsmen, and it had a population of between 10,000 and 11,000 people.⁶³ Prague housed a university, an archbishopric, and the Holy Roman Emperor's court.⁶⁴ Smahel estimated its population at around 37,500 in 1378.⁶⁵ Because of the mines, luxury goods were comparative inexpensive for members of the upper class in terms of silver.⁶⁶ Prague therefore became a consumption market, with customers willing and able to pay much higher prices for the prestigious spices. This created a situation in which the Runtingers competed with other Regensburgers for a much smaller, less wealthy population of customers in Regensburg, but in Prague, they competed with merchants from many other cities (probably including others from Regensburg) for a much larger, wealthier consumer base.

58 Eikenburg, *Das Handelshaus der Runtinger zu Regensburg*, 84, 137.

59 Stromer, "Nuremburg in the International Economics of the Middle Ages," 211.

60 Spufford, *Power and Profit*, 37.

61 Eikenburg, *Das Handelshaus der Runtinger zu Regensburg*, 115.

62 Cf. Table 8.

63 Fischer, *Regensburger Hochfinanz*, 70–72.

64 Demetz, *Prague in Black and Gold*, 82.

65 Smahel, *Husitská revoluce*, 356.

66 Zaoral, "Silver and Glass in Medieval Trade," 299.

In addition to these larger economic factors, the Runtinger transactions were also affected by certain practicalities. After 1389, the Runtingers no longer had a permanent branch in Prague.⁶⁷ In Regensburg, their employee Osana was able to sell individual pieces of silks to veil makers,⁶⁸ thereby selling merchandise at reasonable profit which the Runtingers could not sell profitably wholesale. Perhaps if the Runtingers had had such an opportunity in Prague they could have sold more items profitably.

For a more exact explanation of the Bohemian preferences, one must consider what Bohemian nobles were wearing at the time. Perhaps they preferred wool over silk because of the climate. Likewise, to explain why saffron was in such high demand in Prague—roughly eight times as much saffron was sold as pepper, although pepper was most popular spice elsewhere—one must explore Bohemian cuisine and other uses.⁶⁹ From *Das Runtingerbuch*, we can only conclude that these things were important. The question of the uses to which they were put (i.e. the reasons why they were important) lies beyond the scope of this inquiry.

What Implications Did This Trade Have for the Prague/Bohemian Economy?

The answer to this question involves a detailed analysis of the trade balance. I consider three factors which may yield insights: the real value of the goods sold in Prague and the money obtained thereby; the raw resources in silver that the Runtingers purchased in Bohemia; the nature of these respective goods in relation to stimulating local industry.⁷⁰

In 1372, during the construction of a new cathedral in Prague, a mason could earn 2.5 to three groschen a day, whereas a stone setter could earn three to five groschen a day. A carpenter could earn two to three groschen—although the tariffs one and 2.5 also appear—and an unskilled day laborer could earn eight to 14 parvi, which converts to roughly one half or one whole groschen.⁷¹ Table 7 presents the amount of spices sold calculated in modern kilograms, as

67 Eikenburg, *Das Handelsbaus der Runtinger zu Regensburg*, 115.

68 *Das Runtingerbuch*, vol. 2, 159–67.

69 One must keep in mind that not all spices were consumed in Prague; some were exported further into the hinterland.

70 Certainly, these factors are not exhaustive: the role of credit, politics, and Matthäus Runtinger's involvement in the money trade are other possible factors. The question concerning the extent to which the Runtinger trade in goods and trade in money were connected is beyond the scope of this article.

71 Suchy, "St. Vitus Building Accounts," 228, 230.

well as their prices in terms of groschen per 100 modern grams. Saffron, the most popular and most expensive, sold for up to 24 groschen for 100 grams. In terms of unskilled labor, that is approximately a month's labor for a wage laborer hired at a groschen a day (assuming a six-day work week.) The price of this spice varied considerably, but it never dropped below 14 groschen for 100 grams. Even cloves, the cheapest and least popular spice, sold for .84 groschen for 100 grams—nearly a day's work for an unskilled laborer.

The total money paid to the Runtingers for spices between 1395 and 1404 comes to 28,019 groschen.⁷² That would be approximately equivalent to employing 90 unskilled laborers for one year.⁷³ By contrast, the total cloth goods discussed above sold for 10,011.75 groschen, the yearly wages for approximately 32 laborers. Altogether, this suggests that the Runtingers took in at least 38,030.75 groschen during this nine-year period: enough to hire 122 people. Note that these figures are not exhaustive; they do not take into account every good that the Runtingers ever sold, but only those which they sold regularly and in large amounts.

While they did not export finished goods, the Runtingers did buy one local resource: silver in the form of *gebegen gelt*, or damaged groschen. The Prague groschen was intended to be an eternal coin, with unchanging weight and fineness. Originally, it was minted from silver of up to 15 lots—essentially the Medieval standard of pure silver.⁷⁴ Although it was debased gradually, it retained a very high and stable value relative to other coins of the period. When worn or damaged coins were removed from circulation, they were sold by weight for their silver. The Runtingers bought this *gebegen gelt* and sold it both in Regensburg and in Venice. Their trade in this commodity can be divided into two periods: 1384–87, when father and son traded together and operated a permanent branch in Prague, and from 1392 onwards, when Matthäus Runtinger struck coins. I focus on the earlier period.

Matthäus Runtinger rode to Prague for the express purpose of buying this silver in December 1385/January 1386, May 1386, and March/April 1387. I analyze the 1387 journey in detail because it offers a concise demonstration of

72 *Das Runtingerbuch*, vol. 1, 636–38.

73 Laborers were paid once a week. They were hired as needed, and tariffs could change, so this is an incredibly crude approximation, not a concrete historical case. It does, however, give a general idea of the scale of the opportunity cost.

74 Milejski, "Weight debasement of Prague groschen," 99.

how this trade functioned. First, on March 6, Wilhelm Runtinger recorded the following:

Item ich santt gein Prag dez mitichen in der andern vastwochen in ainem pallen newn sekch und ainen chlainen sakch mit pfeffer. Da waz in 1382 pfeffers; da hab wir drew jar in dem hauz von verzirt und ze weinachten auzgesannt.⁷⁵

Considerable amounts of pepper were not profitably sold in Regensburg until 1395.⁷⁶ Evidently, the Runtingers gave pepper as Christmas presents only in years when it did not bring a good price. On the same day, Wilhelm added the following:

E Item mir furt der Pakerl von Chamb den pfeffer gein Prag; ich gib im ye von ainem saum 98 grozz. Ich gab im 7 guldein daran, da er auzfur; so gab ich dem Taberstorfer 9 guldein, da sol er den wagenman von richtten ze Prag. Er sol den pallen in dem franhof wegen; waz der wigt, da lon ich im nach.⁷⁷

A *saum* equals roughly 200 kilograms,⁷⁸ about the amount that a packhorse could comfortably carry. Here, we see that the Runtingers loaned their carriers enough money to get them to Prague and then paid them the difference based on what was successfully delivered and weighed by government officials. This gave the carriers a high incentive to protect the goods. Five days later, Wilhelm sent his son Matthäus to Prague:

a E Item ez rait mein sun Matheus der Runttinger gein Prag dez Montag vor mittervasten, er furt mit im 1800 fugspalg, di sol er da ynn verchafffen und sol ein wegzel darumb pringen, alz er wol waiz. Ez rait mit im hie auz Hanns und Hainreich di Portner. *b R* Und 4 fuchspalig.

75 *Das Runtingerbuch*, vol. 1, 86.

Translation: On Wednesday of the second week in Lent, I sent nine sacks and also a small sack of pepper in a bale. Inside were 1,382 pounds of pepper; we ate of it three years in the house and sent some out as Christmas presents.

76 See table 2.

77 *Das Runtingerbuch*, vol. 1, 87.

Translation: Pakerl of Chamb took the pepper to Prague for me; I am to give him 98 groschen for each saum. I gave him seven gulden thereof, as he is traveling; likewise I gave Mr. Taberstorfer nine gulden for the wagon man to Prague. He is to weigh the bundles in the Fronhof [customs courtyard]; I will pay him according to what it weighs.

78 Eikenburg, *Das Handelsbaus der Runtinger zu Regensburg*, 290.

Di sind verchauft ye ainer umb 18 g. und 8 halter, suma an gelt pringt
 551 sxn. 14 g. 8 halter. B R Item dez piper vaz 1475 pfund; der ist
 verchauft ye 1 zent umb 10 sxn. G., suma der piper 147 ½ sxn. G.
 b R Suma umberal der piper und di fugspalig pringent 708 sxn. 44 g. 8
 halter.⁷⁹

From this account, it becomes clear that the Runtingers sent designated goods to Prague, sold them for money, and then bought silver with these proceeds and took it back to Regensburg. This saved them the expense and risk of transporting money unnecessarily. The profit from the pepper and “fox pelts” was not their primary object; they stood to gain more from the low prices of silver.

The “fox pelts” mentioned here are a curious anomaly. The corresponding silver purchase in May 1386 records 1,000 red squirrel pelts. Bastian suggests that these furs are shorthand for actual gulden. While Wilhelm writes of 100 squirrel pelts in 1386, Matthäus refers to them as gulden in the next entry. Also, the squirrel pelts were each sold for 18 groschen and four halter, while the fox pelts sold for 18 groschen and eight halter, which is odd because fox was usually much more expensive than squirrel. On the other hand, these prices seem like reasonable numbers for a slightly fluctuating gulden-groschen exchange rate over this ten-month period. Finally, based on other sources, furs typically traveled from Prague to the south, not the other way around.⁸⁰ Interestingly, this shorthand is only used by Wilhelm and only in connection with Prague silver trade, never concerning trips to Frankfurt, for example. Coupled with Wilhelm’s shorthand *wegzuel* in this entry, it may indicate that Wilhelm wanted to avoid drawing attention to this trade.

This intriguing but somewhat speculative digression aside, on April 16, Matthäus recorded the following.

⁷⁹ *Das Runtingerbuch*, vol. 2, 87.

Translation: My son Matthäus Runtinger rode to Prague on the Monday before Miterfast. He took 1,800 fox pelts, which he is to sell there and bring back an exchange, as he knows. Hanns and Hainreich, the porters, rode with him. b.R and four fox pelts. They were sold for 18 groschen and eight heller each, total of 551 marks 14 groschen and eight halter. B.R. item the pepper was altogether 1475 pounds, they are sold at ten marks of groschen, per Zentner, total for pepper 147½ groschen. b.R Total of both pepper and fox pelts 708 marks 44 groschen eight halter.

⁸⁰ *Das Runtingerbuch*, vol. 2, 86–88.

b R Item so han ich chaufft 469 march an 2 lot gebegener g., suma pringt
an gelt 698 ½ sxn. 3 g. 8 haler, chumt ye 1 march umb 1 ½ sxn. an 6 haler.
Di ist (!) in acht stuchen.⁸¹

The rest of the entry details some of the proceeds from resale in Regensburg and the money Matthäus owed Wilhelm. Proceeds from fustian in 1386 were used in a similar way.⁸² The *modus operandi*, then, was to send valuable goods to Prague, sell them off, reinvest the proceeds in *geben gelt*, and bring the silver to Regensburg or Venice for resale. In this case, low silver prices were more likely to influence their decisions than high sale prices for other goods.

Frantisek Graus has already calculated the total amount of money that was sent from Prague back to Regensburg during the period between 1384 and 1387 (see table eight). A *schock* of groschen equals 60 coins and a gulden was equal to 18 groschen around 1385.⁸³ We can see that a total of 320,236.5 groschen were removed from Prague. In terms of unskilled labor, that is the annual salary of 877 people. To give these numbers further perspective, Graus notes that the biannual income of the Prague Archbishop, who was one of the wealthiest Bohemian landowners, was 1,338 *schock* and six groschen in cash, 1382/83.⁸⁴ That is equal to 80,286 groschen total. Comparing this figure with table eight, we see that the amount of money the Runtingers removed from Bohemia was on average comparable to the biannual income of the very wealthiest Bohemian nobles.

It is abundantly clear that the Runtinger family drained enormous amounts of money and silver from Prague on a regular basis. This was accentuated by the fact that the Runtingers were selling finished consumer goods for raw materials. This meant that the trade did not stimulate economic growth. When the Runtingers traded in cotton with the fustian weavers in Regensburg, for example, the Regensburg economy was stimulated because Regensburg fustian weavers were employed. The weavers added value to the product and some money stayed in Regensburg as their wages. In contrast, when the Runtingers brought silver, they stimulated no such local industry. The mine owners, miners, and other personnel only turned a profit as long as the silver lasted. The same principle applies to the spice trade. Some luxury consumer items could lead to local industry. Imported

81 Ibid., 88.

Translation: Item I bought 469 marks and two lots devalued groschen, total money 698½ *schock* 3 groschen and eight heller, which comes to one mark for 1½ *schock* six haler. They are in eight pieces.

82 *Das Runtingerbuch*, vol. 1, 83.

83 Eikenburg, *Das Handelsbaus der Runtinger zu Regensburg*, 278.

84 Graus, “Die Handelsbeziehungen Böhmens,” 108.

Islamic glass was gradually mingled with Venetian imitation and eventually replaced by production in Bohemia in the fourteenth century.⁸⁵ Spices, however, could not be grown or imitated in Bohemia,⁸⁶ but only purchased for money. Precious metal therefore flowed out of Bohemia in two forms: money and raw silver. Finished goods flowed in, raw materials flowed out.

Conclusion

Das Runtingerbuch is a rich source, and this article has certainly not exhausted it. For example, I have not explored the role of credit in Prague or the exact role of the money trade. Without the trade in *gegeben gelt*, would Prague have attracted spice merchants? To answer this question, one could analyze the entire Runtinger financial operations involving silver. One could also compare rival merchants for the Prague market, i.e. Regensburg and Nuremburg.

Neither has this article placed the Runtinger activities fully in context. Since the Runtingers sold wholesale, the spices would have been marked up yet again. To fully understand the role of spices in the Bohemian economy, one must consider the end customers and the prices they were paying. One might investigate the travel accounts of Henry of Derby, for example, who bought many luxury goods during his stay in Prague. One might also examine the impact of events in Bohemian political history and the activities of other trading companies, be they from Frankfurt, Cologne, or Nuremburg or even Jews from Prague.

At the same time, this case study supports our existing understanding of the trends: Prague was a silver supplier and was consequently blessed with economic prosperity, but it remained relatively passive and undeveloped in its economic activity. The treaty of Visegrad testifies that the Bohemian rulers understood the significance of their silver and the power it gave them. Nonetheless, they were content to rely on the offices of assertive foreign merchants such as the Runtingers. Certainly, we see some progress, such as the presence of Bohemian merchants in Flanders and some amount of domestic textile production. At the same time, compared with Regensburg and Venice, such development was slow and unimpressive. Yet this long-distance trade did promote Prague as a political and intellectual center. Like the Syrian glass found in the Old Town of Prague, the spices indicate a refined (or at least pricey) dining culture, reflecting the desire

85 Zaoral, "Silver and Glass in Medieval Trade," 301.

86 Saffron might have been an exception.

of the Bohemian nobles to raise their status by participating in wider trends typical of high society. A French manuscript made in 1378 depicts Charles IV and Wenceslaus IV of Bohemia at a feast at the court of Charles V of France. Along with the usual trappings of this kind of ceremonial occasion, we see two silver boat-shaped spice dishes prominently displayed in front of the two men. These two things, the silver and the spice, are symbols of the new position Charles IV wished to obtain (and temporarily achieved) for Bohemia.

Tables

Table 1. The European imbalance of payments in the fifteenth century

The European Balance of Payments	
The Venetians brought back	The Venetians sent out
400,000 ducats of spices from farther east	300,000 ducats in coins
880,000 ducats of goods from the Near East	200,000 ducats in goods
20,000 ducats in coins	
Other Europeans brought back	Other Europeans sent out
130,000 ducats of spices from farther east	100,000 ducats in coins
20,000 ducats of goods from the Near East	60,000 ducats in goods
10,000 ducats in coins	

Source: Spufford, *Power and Profit: The Merchant in Medieval Europe*, 346.

Table 2. Spices in the Runtinger trade: A comparison of Prague and Regensburg

Good	Year	Regensburg			Prague		
		Amount (in V. Ilb.)	Markup	Profit	Amount (V. Ilb.)	Markup	Profit
Saffron	1383	147	19.6%	16.4%			
	1395				177.19	29.3%	20%
	1399				138	27%	20%
	1400-1	206.2	13.8%	10.6%	159.5	28.5%	20%
Pepper	1387				2212.5	33%	14.2%
	1395	2030.5	31.66%	19.7%	63.75	70%	42.5%
	1400-01	888.74	32.25%	18%			
	1403-04	300	42.33%	27%			
Cloves	1395-1404				51.06	44.66%	30.7%
Ginger	1395-1404				66	24.66%	9.13%
	1400	50	17.5%	9.25%			

Source: Bastian, *Das Runtingerbuch*, vol. 1, 616–27, 636–38.

Table 3. Saffron sold in Prague

	1395	1399	1401
Amount sold (in V. Ilb)	177.19	138	159.5
Ducats per pound in Venice	1.54	2.54	2.16
Ducats per pound in Prague	1.99	3.22	2.77
Markup	29.3%	27%	28.5%

Source: Bastian, *Das Runtingerbuch*, vol. 1, 636–38.

Table 4. Fustian sold in Prague

Year	1401	1402
Amount sold	22	168
Sale price: Venetian ducat per length of Fustian	1.78	1.62
Transportation costs	32,42%	37%
Markup	74%	55%
Profit	31%	13.15%

Source: Bastian, *Das Runtingerbuch*, vol. 1, 639–40.

Table 5. Silks sold in Prague in 1383

Type	Amount	Markup	Profit
Finished	Syrian	37%	33%
	Bortenseide	31%	27%
Unfinished	1 piece, red, from Venice	22.3%	19%
	1 red, 1 gray from Lucca	37.3%	25%

Source: Bastian, *Das Runtingerbuch*, vol. 1, 634–35.

Table 6. Average profitability

		Regensburg	Prague
Spices	Pepper	21.6%	42.2% ¹
	Safran	13.5%	20%
	Cloves	(none sold)	30.7%
	Ginger	9.25%	9.13%
	All spices	16.83%	25.51%
Cloth	Fustian	(none sold)	22.07% ²
	Cotton	22.5%	(Sold; unprofitable)
	Silk ³	17.5% after 1400.	26% in 1383; afterwards little to no profit
	Gold thread	22%	(Sold; unprofitable)

Source: Bastian, *Das Runtingerbuch*, vol. 1, 618–38, *derived*.

Table 7. Spices in Prague in modern kilograms, 1395–1404

Type	Amount sold, modern kg.	groschen/100 g.
Pepper	18.97	1.88
Cloves	15.19	0.84
Safran, 1395	52.71	14.13
Safran, 1399	41.06	24.00
Safran, 1401	47.45	20.64
Ginger	19.64	2.24

Source: Bastian, *Das Runtingerbuch*, vol. 1, 636–38, *derived*.

Table 8. Total money removed from Prague by the Runtingers, 1384–1387

	In actual currency	Recalculated in groschen
1384	1,919 gulden 1,098 schock 49 groschen 2 hellers	100,471 groschen 2 hellers
1384	1,696 gulden 558 schock 58 ½ groschen	64,066.5 groschen
1386	1,186 schock 51 groschen	71,211 groschen
1387	1,408 schock 8 groschen 8 hellers	84,488 groschen 8 hellers
Total	3615 gulden 4252 schock 46.5 groschen 10 hellers	320,236.5 groschen 10 hellers

Source: Graus, “Die Handelsbeziehungen Böhmens,” 107–8.

1 This figure deliberately overlooks the sale of pepper in 1383 for a profit of 14.2 percent. This sale will be discussed in detail below. It suffices here to say that it constitutes an exception or outlier, and including it would not help give a clear picture of the normal state of the market.

2 Here again the sale of 1383 for a 70 percent profit is not considered. See 92.

3 Since my object is to offer a general impression of the markets, I am comparing all silks sold in Regensburg with silks sold in Prague from 1383, when there was a real market for them. I am excluding the slight sales in Prague after 1400.

Bibliography

Primary sources

Das Runtingerbuch. Edited by Franz Bastian. Regensburg: Die Historische Kommission bei der Bayerischen Akademie der Wissenschaften 1930.

Secondary literature

Bilek, Jaroslav. *Kutnoborské dolování*. Vol. 9, *Historický přehled k problematice poddolování, bald a Vrchlické přebrady* [Kutná Hora mining. Vol. 9, Historical overview of the problems of mining, piles at the Vrchlice Dam]. Kutná Hora: Kuttna, 2001.

- Demetz, Peter. *Prague in Black and Gold: The History of a City*. London: Penguin Books, 1998.
- Denzel, Markus A. *The Merchant Family in the "Oberdeutsche Hochfinanz" from the Middle Ages up to the Eighteenth Century*. Firenze: Firenze University Press, 2009.
- Eikenburg, Wiltrud. *Das Handelshaus der Runtinger zu Regensburg. Ein Spiegel süddeutschen Rechts-, Handels- und Wirtschaftslebens im ausgehenden 14. Jahrhundert*. Göttingen: Vandenhoeck & Ruprecht, 1976.
- Fischer, Klaus. "Das 'Runtingerbuch' als Quelle zum Wirtschaftsleben Regensburgs im Spätmittelalter." In *Regensburg im Spätmittelalter*, edited by Peter Schmid, 215–30. Regensburg: Schnell und Sneider, 2007.
- Fischer, Klaus. *Regensburger Hochfinanz*. Regensburg: Universitätsverlag, 2003.
- Freedman, Paul. *Out of the East: Spices and the Medieval Imagination*. New Haven and London: Yale University Press, 2008.
- Gilomen, Hans-Jörg. "Die ökonomischen Grundlagen des Kredits und die christlich-jüdische Konkurrenz im Spätmittelalter." In *Ein Thema – zwei Perspektiven. Juden und Christen in Mittelalter und Frühneuzeit*, edited by Evelin Brugger, and Birgit Wiedl, 139–69. Innsbruck: Studien Verlag, 2007.
- Graus, František. "Die Handelsbeziehungen Böhmens zu Deutschland und Österreich im 14. und zu Beginn des 15. Jahrhunderts. Eine Skizze." *Historica. Historical Sciences in Czechoslovakia* 2 (1960): 77–110.
- Lopez, Robert S., and Irving W. Raymond, eds. *Medieval Trade in the Mediterranean World*. New York: Columbia University Press, 1995.
- Spufford, Peter. *Power and Profit: The Merchant in Medieval Europe*. New York: Thames & Hudson, 2003.
- Spufford, Peter. *Money and its Use in Medieval Europe*. Cambridge: Cambridge University Press, 1989.
- Stromer, Wolfgang von. "Nuremberg in the International Economics of the Middle Ages." *The Business History Review* 44, no. 2 (1970): 210–15.
- Suchý, Marek. "St. Vitus Building Accounts (1372–378): The Economic Aspects of Building the Cathedral." In *Money and Finance in Medieval Europe during the Late Middle Age*, edited by Roman Zaoral, 222–46. New York: Palgrave Macmillan, 2016. doi: 10.1057/9781137460233_15
- Eikenberg, Wiltrud. *Das Handelshaus der Runtinger zu Regensburg. Ein Spiegel süddeutschen Rechts-, Handels- und Wirtschaftslebens im ausgehenden 14. Jahrhundert*. Göttingen: Veröffentlichungen des Max-Planck-Instituts für Geschichte, 1976.

- Milejski, Pawel. “Weight debasement of Prague groschen of Wenceslas IV (1378–1419) based on Polish and Lithuanian hoards.” In *From ore to money, mining, trading, minting. Proceedings of the Tallinn (2018) Conference*, edited by George Depeyrot, and Ivar Leimus. Collection Moneta 202, 99–112. Wetteren: Moneta, 2018.
- Musílek, Martin. “Zlomek knihy vydání, v níž jsou jména Židů ‘Nově objevený’ rukopisný zlomek kupeckého rejstříku a jeho výpověď pro pražský obchod ve středověku” [A fragment of an edited book containing the name of Jews: The newly discovered manuscript fragment of a merchant register and its informative value for Prague trade in the Middle Ages]. In *Pražský sborník historický* 44 (2016): 141–66.
- Zaoral, Roman. “Silver and Glass in Medieval Trade and Cultural Exchange between Venice and the Bohemian Kingdom.” *The Czech Historical Review* 109, no. 2 (2011): 284–310.