

**Consumption, Social Capital, and the “Industrious Revolution”
in Early Modern Germany**

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Abstract

Theories of the Consumer and Industrious Revolutions view increases in market consumption and market work as central to European economic growth before industrialization. This paper uses quantitative and qualitative evidence from German-speaking Central Europe to address open questions about the Consumer and Industrious Revolutions. Did they happen outside the North Atlantic economies? Were they shaped by the “social capital” of institutions other than family and market? And how were they affected by social constraints on women? The paper finds that populations outside the North Atlantic economies did desire to work and consume in the market between 1650 and 1800. But the extent to which they could implement these desires was constrained by entrenched elites who perceived new work and consumption practices as threats to their control of resources. Such elites used guilds, communities, religious bodies, political authorities, and institutionalized social networks to oppose new patterns of time-allocation and consumption. They deployed such “social capital” particularly forcefully against women, migrants, and the poor – central agents in any Consumer or Industrious Revolution. Although they seldom succeeded in blocking new practices wholly, they often delayed them, limited them socially, or increased their costs.

Market consumption is widely ascribed a key role in European economic growth before industrialization. A “Consumer Revolution” between 1650 and 1800 is thought to have seen the middle classes spending lavishly on luxuries and the masses buying cheap fashions and comestibles.¹ In a parallel “Industrious Revolution”, it is argued, a growing desire for market goods motivated households – especially women – to re-allocate time from leisure and household production to income-earning work.² New norms of market consumption and market work are supposed to have become self-reinforcing, drawing hitherto unused supplies of human time and ingenuity into productive activities and increasing the demand for new goods. “Men are now forced to labour”, as one eighteenth-century political economist put it, “because they are slaves to their own wants”.³ These Consumer and Industrious Revolutions in turn fuelled the agricultural revolution, proto-industrialization, factory industrialization, and a huge growth in living standards – “lower morbidity and mortality, better nutrition and higher educational levels, greater domestic comfort”.⁴

The theories of the Consumer and Industrious Revolutions thus have far-reaching implications not only for economic history but for economic development more widely. However, they also contain significant open questions.

For one thing, the revolutions in consumption and industriousness are supposed to have occurred throughout early modern Europe, but supportive evidence – inventories showing a proliferation of market goods, scattered sources hinting at longer working hours – comes almost exclusively from the north Atlantic economies, especially the Netherlands and England.⁵ For central and southern European societies, as well as for parts of Asia, revolutions in consumption and industriousness are also postulated, but have yet to be thoroughly investigated.⁶ These other pre-industrial economies also experienced agricultural growth, proto-industrialization, and ultimate factory industrialization – albeit much later – but we do not know whether they, too, experienced a parallel transformation of consumption and industriousness.⁷ Until we explore the Consumer and Industrious Revolutions for other societies than the Netherlands and England – which, as the “miracle economies” of early modern Europe, may have been exceptional – their significance for economic development cannot be fully understood.

¹ McKendrick (1974), esp. 197-200; Berg (1985), 169-72; Brewer and Porter (1993).

² De Vries (1992), esp. 106, 110, 112-4, 118-9; De Vries (1994), esp. 257, 261; De Vries (2008).

³ Steuart (1767), 67.

⁴ De Vries (1992), esp. 106, 110, 112-4, 118-9; De Vries (1994), esp. 257, 261, 264 (quote); De Vries (2008).

⁵ Berg (2005); McKendrick (1982); De Vries (1992); Belfanti and Giusberti (2000); Carlson (1994); Dekker (1994); Dibbits (1996); Blondé / Van Damme (2006).

⁶ For Germany, see Safley (2005), 348; Beck (2003); and Maynes (2004), 59-60. For France, see De Vries (1992), 114; Maynes (2004), 60; Crowston (2005), esp. 71. For Italy, see Pinchera (2006), 6. For Spain, see Ringrose (1996), 287; Ramos (2004), 1-2, 30-34. For China, see Bayly (2004), 52; Pomeranz (2000), 94-5. For Japan, see Bayly (2004), 52, although for an opposed view see Saito (2005), 37-9.

⁷ For doubts, see Allen (2006), 15.

This raises a second question – social and institutional variation. Consumption and production are social activities, yet the Consumer and Industrious Revolutions supposedly involved only two social institutions: the market and the nuclear family.⁸ This may be justified for the Netherlands and England, with their precocious market economies. But most parts of early modern Europe had active non-market, non-familial institutions: craft guilds, merchant associations, village communities, urban corporations, manorial systems, religious organization, privileged corporate “orders”, political bodies, and many more.⁹ Political scientists regard many pre-modern institutions (particularly guilds and communities) as exemplars of the closely-knit and multi-stranded social networks that generate “social capital” – the stock of norms, information, sanctions, and collective action that are believed to play a key role in economic development.¹⁰ Social institutions and their associated social capital varied greatly across early modern Europe, but they have not yet been incorporated into the Consumer or Industrious Revolutions.

This leads to a third open question – women’s economic role. These early modern “revolutions” were supposedly spearheaded by females, who increasingly purchased clothes and comestibles in the market, using cash they earned from reallocating time from unpaid household work to market jobs.¹¹ This might seem perfectly consistent with what we know about the Netherlands and England, where early modern travellers remarked on the astonishing degree of freedom manifested by Dutch women,¹² and the Duke of Württemberg wrote on his 1598 visit to England that “the women have much more liberty than perhaps in any other place; they also know well how to make use of it, for they go out dressed in exceedingly fine clothes ... [England is] a paradise for women, a prison for servants, and a hell or purgatory for horses ... for the females have great liberty and are almost like masters, whilst the poor horses are worked very hard”.¹³ But in most early modern European economies women faced profound institutional constraints on their work and consumption choices. These social constraints on women have yet to be incorporated into the Consumer and Industrious Revolutions.

This paper addresses these open questions by focusing on an economy in Central Europe with good data on economic activity by both sexes, and social institutions unlike those of the classic Consumer Revolution economies. The southwest German territory of

⁸ See, e.g., De Vries (2008), 19.

⁹ See Ogilvie (1996, 1997, 2003).

¹⁰ For positive views of this role, see Putnam et al. (1993), pp. 163-185; Putnam (2000), pp. 319, 322-3, 325, 346-8. For a more critical evaluation, see Ogilvie (2003, 2004a, 2004b).

¹¹ De Vries (1992), esp. 118-9; De Vries (1994), 261; Noordegraf / Van Zanden (1995); McKendrick (1974), 199-200; Berg (1985), 169-72 .

¹² See the contemporary descriptions quoted in Laurence (1994), 129-35; and Schama (1987), 404, 407-12.

¹³ Frederick Duke of Wirtemberg, “A true and faithful narrative of the bathing excursion”, in Rye (1865), 7, 14.

Württemberg differed from the Netherlands and England, but resembled many other parts of continental Europe, in the enduring powers of its guilds, communities, and local religious institutions. Württemberg retained occupational guilds until 1862, not just in traditional handicrafts, but also in export-oriented proto-industries, shop-keeping, and merchant trading.¹⁴ Württemberg also had powerful local communities, whose courts, councils, officials, and citizens' assemblies enabled them to monitor and regulation factor markets, product markets, demographic decisions, education, work, leisure, and consumption.¹⁵ Württemberg established local church courts in the 1640s which remained active until c. 1890, had power to impose money fines and incarceration as well as religious penances, and closely regulated work, consumption, sociability, sexuality, poor relief, and cultural practices.¹⁶ Detailed micro-studies have shown how these guilds, communities, and religious institutions generated a rich "social capital" of shared norms, information, sanctions, and collective action, which significantly influenced economic decision-making.¹⁷ Württemberg thus provides a good test case for investigating how institutions other than the market and the nuclear family could affect consumption and industriousness in early modern Europe.

What would we expect to observe if the "social capital" of traditional institutions affected the Consumer and Industrious Revolutions? First, social institutions often enforce norms about labour force participation and remuneration – particularly for women, youths, and the labouring poor. So the first section of this paper examines whether social institutions, by regulating work and wages, observably changed people's incentives and capacity to reallocate time from household to market production. Second, social institutions often enforce norms about commerce – who could trade, in what goods, in what ways. Section 2 therefore explores whether social capital, by regulating commerce, affected how retailers made new market wares available to wider social strata. Third, social institutions often impose norms about the quantity, quality, and style of consumption deemed appropriate for particular social groups – particularly for women and the lower social orders. Section 3 therefore investigates whether sumptuary norms observably affected people's ability to adopt new consumption practices. Finally, social institutions often enforce norms about gender roles and household authority – particularly norms governing relations between husbands and wives. Section 4 therefore examines whether extra-familial social institutions, by intervening in family conflicts, observably altered women's incentive and capacity to increase their market work and market consumption.

¹⁴ See Ogilvie (1997), 72-9, 106-11, 419-37; Ogilvie (2004a); Medick (1996), esp. 65-140.

¹⁵ Ogilvie (1986); Ogilvie (1997), 42-72; Ogilvie (2003); Sabeian (1990), 106, 109, 148, 160-1; Warde (2002), esp. 22.

¹⁶ Popkin (1996); Ogilvie (2003).

¹⁷ See Maisch (1992); Medick (1996); Ogilvie (1997); Ogilvie (2003); Rublack (1999); Sabeian (1990); Warde (2002).

1. Social Capital and “Industriousness”

For the Industrious Revolution to succeed, economic agents mainly active in household production and leisure – particularly women – had to be free to shift into market employments. They also had to be offered remuneration that motivated them to make this move. Historians of the Netherlands and England have pointed out two of the institutional preconditions for this to happen – a family system permitting women to work outside the household, and labour markets for both sexes – both of which were satisfied under the European Marriage Pattern.¹⁸ But *other* institutions also affected the extent to which women could shift from household to market, as we see by broadening the analysis to other parts of Europe.

Württemberg, as Table 1 shows, had all the hallmarks of the European Marriage Pattern – late female marriage, high female celibacy, low fertility, small and simple nuclear-family households. Indeed, female celibacy increased over time, as male emigration rose.

Table 1:
Women and the European Marriage Pattern in Pre-Industrial Württemberg

Benchmark	Date	Place	Value
Mean age at first marriage for females	1575-1624	Wildberg	23.5
	1659-1722	Wildberg	26.0
	1693-1746	Wildberg	26.0
	1658-1884	Laichingen	26.7
	1652-1875	Böhringen	24.6
	1780-1789	Neckarhausen	26.4
% of females over age 49 dying unmarried	1615-1699	Wildberg	7.8
	1700-1799	Wildberg	15.7
	1800-1834	Wildberg	17.4
	1615-1834	Wildberg	14.0
% of females over age 45 dying unmarried	1625-1699	Laichingen	8.7
	1700-1799	Laichingen	8.1
	1800-1874	Laichingen	17.5
	1625-1874	Laichingen	11.8
% of females over age 49 alive and unmarried	1717/1722	Wildberg	14.0
	1744	Wildberg	13.0
% of females not currently married (all ages)	1717/1722	Wildberg	65.0
	1744	Wildberg	70.0
% of females not currently married (aged 15-64)	1717/1722	Wildberg	50.0
	1744	Wildberg	47.0
Sex ratio (males per 100 females)	1626/1631	Wildberg	91
	1717/1722	Wildberg	82
	1744	Wildberg	77
	1736/1737	Bietigheim town	87
	1736/1737	Bietigheim villages	86
Estimated GRR	1717/1722	Wildberg	2.08
Mean household size	1717/1722	Wildberg	4.2
Per cent nuclear-family households	1717	Wildberg	87

Sources: Ogilvie (1997), 225-307; Ogilvie (2003), 40-78; Medick (1996), 319, 633; Sabeau (1998), 218; Maisch (1992), 226-33.

¹⁸ De Vries (2008), 9-19.

Had the family system been all that mattered, low sex ratios and high female celibacy should have created generous labour market opportunities for women. Women in Württemberg did often work in the market, as I have shown in detail elsewhere. But the jobs they did and the wages they earned were affected by institutions other than family and market.¹⁹

For one thing, community courts and officials often ordered women to work inside households for parents, husbands or masters rather than taking market employment. Independent unmarried women were given an especially pejorative name – *Eigenbrötlerinnen* (literally “own-breaders”) – and were routinely harassed. Communities tolerated them only as long as they did not encroach on guild privileges, charge wages above the legally fixed rate, deprive male relatives of cheap household labour, take risks that might burden the welfare system, annoy respectable citizens, or violate other social norms. In 1646, for example, when a Wildberg citizen complained that “several unmarried girls are lodging with several citizens here, and should, in his view, be instructed to engage themselves to masters”, the community assembly immediately ordered all *Eigenbrötlerinnen* to take service within three weeks on pain of a fine of 3 *Gulden* (almost one year’s earnings for a maidservant).²⁰ It was not uncommon for an *Eigenbrötlerin* to be ordered, like Barbara Waltz in 1687, “either to enter into service or, if she has an honourable offer, to get married”.²¹ *Eigenbrötlerinnen* who refused to shift back from market to household production could be ordered to leave the community, as in 1687 when the Ebhausen church court “summoned Barbara Hilber on account of her *Eigenbrötlen* [own-breading]” and “ordered her out of the hamlet”,²² in 1717 when three Ebhausen *Eigenbrötlerinnen* were instructed to “move away within eight days”,²³ or in 1752 when Barbara Kleiner was reported to the Wildberg court by her landlord for working independently as a lodger “although she could work as a servant” and was promptly ordered “to refrain from *Eigenbrötlen*, and instead enter into a proper job as a servant; otherwise she shall be driven out of the town by order of the authorities”.²⁴

Communities regulated the residence and work even of quite mature women, such as the 45-year-old spinster Friderika Mohlin who in 1796 moved into lodgings to earn her living as a seamstress, but was ordered by the communal court “to betake herself back into her

¹⁹ Ogilvie (2003); Ogilvie (2004b); Ogilvie (2004c).

²⁰ HSTAS A573 Bü. 86, fol. 265r, 24.11.1646: “bei etlichen burgern alhie, hielten sich etliche ledige magden auff, welche seines erachtens dahin anzuehallten weren, daß Sie sich verding. thetten”.

²¹ PAE KKP, Vol. I, fol. 28v, 2.2.1687: “entweder in ein diest geh. od, wann sie ein Ehrlich. anstand habe, sich verheurath.”

²² PAE KKP, Vol. I, fol. 32r, 9.12.1687: “barbara hilberin ist wegen des aigenbrötlens vorbescheyd. worden”; “Ist ... auß dem Fleckhen gehaisen word.”

²³ PAE KKP, Vol. III, fol. 16, 16.4.1717: “innerhalb 8 tagen wegZiehen”.

²⁴ HSTAS A573 Bü. 95, fol. 31v, 14.12.1752: “die Zwar dienen könnte”; “sich deß Eigebrötlens zu bemüßigen, hingegen in einer ordenlichen dinst zugehen, widerigen falls sie aus der Stadt von obrigkeits wegen getriben werden solle”.

father's house".²⁵ Married women, too, encountered obstacles in shifting from household to market employment, as in 1742 when the Ebhausen communal court ordered a knitter's wife who was working independently to return to her prodigal husband,²⁶ or in 1793 when a Wildberg citizen complained at the community assembly that the wife of an itinerant basket-maker was collecting rags for a village paper-miller without an official licence, whereupon the assembly ordered the village to eject the couple.²⁷ Many Württemberg women did work in the market, but many others were prevented from doing so by the officials, courts and assemblies of the communities they lived in. Such institutional obstacles inevitably limited women's ability to contribute to any revolution in industriousness.

Even when women were allowed to work, institutional controls limited what they could earn. Württemberg, like many other pre-modern European societies, set legal wage ceilings for servants and labourers.²⁸ The legislation was issued by the state, but the specific wage-rates were set by each community – that is, by male employers, since it was they who manned community institutions.²⁹ The wage ceilings were also enforced by community courts. To give just one example, in 1619 Hans Drescher in Wildberg demanded that Burckhard Schlaiffer's wife 'be punished according to the national ordinance' because she 'enticed away a [maid]servant whom Drescher had at his place for several years during the inflation period'.³⁰ Comparisons between ordinances and actual wages paid reveal few violations.³¹

Württemberg resembled other European economies in fixing wage ceilings for both sexes but setting them disproportionately lower for women.³² As Table 2 shows, wage ordinances in Württemberg and other parts of southern Germany prescribed a ratio of about 0.3 between female and male wages, and surviving wage records indicate this was approximately the ratio paid. But this was much lower than the 0.7 female-male productivity ratio in manual labour, or the 0.6-0.7 ratio of wages actually paid in early modern England.³³

The same was true in spinning, another major employment for Württemberg women. Spinners' male employers – the weavers and the dyers – used their guild organizations to agree legal ceilings on spinners' piece-rates. Spinners who charged above the ceiling had their yarn confiscated, and weavers who paid above the ceiling – e.g. to secure scarce spinning

²⁵ HSTAS A573 Bü. 62, fol. 24r-v, 18.1.1796: "Sich wider in ihres vatters Hauße zu begeben".

²⁶ PAE KKP Vol. III, fol. 166r, 27.4.1742.

²⁷ HSTAS A573 Bü. 100, fol. 28r-v, 1793.

²⁸ Ogilvie (2003), 109-15, including examples from German economies other than Württemberg.

²⁹ See, e.g., HSTAS A573 Bü. 5280, fol. 46r, 9.3.1654.

³⁰ HSTAS A573 Bü. 15, fol. 436r, 2.12.1619: "ain ehehalten, so er drescher in der theüwerungs zeit etlich jarlang bey sich gehabt, ein ehehalten entfiehrt, begert man solle sie der landsordnung nach abstraffen".

³¹ Dürr (1995), 125-9, 151; Ogilvie (2003), 109-15.

³² Penn (1987), 4-5, 7, 9, 13; Ogilvie (2003), 287-95.

³³ Kussmaul (1981), 37, 143-4; Roberts (1979), 19; Roberts (1981), 189; Burnette (1997), 270, 275; Ogilvie (2003), 111; Vogel & Friedl (1992), 93.

Table 2:
Female-Male Wage Ratios, Calorie Consumption, and Physical Productivity, Various Economies

Place	Date	Type of worker	Measure	Basis	Ratio
Wildberg, Württemberg	1631	servants	actual wages paid	mean	0.35 ^a
Wildberg, Württemberg	1631	servants	actual wages paid	maximum	0.36 ^a
Ebhausen, Württemberg	1631	servants	actual wages paid	mean	0.48 ^a
Ebhausen, Württemberg	1631	servants	actual wages paid	maximum	0.23 ^a
Sulz, Württemberg	1631	servants	actual wages paid	mean	0.57 ^a
Sulz, Württemberg	1631	servants	actual wages paid	maximum	0.31 ^a
Gütlingen, Württemberg	1631	servants	actual wages paid	mean	0.40 ^a
Gütlingen, Württemberg	1631	servants	actual wages paid	maximum	0.31 ^a
Oberjettingen, Württemberg	1631	servants	actual wages paid	mean	0.57 ^a
Oberjettingen, Württemberg	1631	servants	actual wages paid	maximum	0.38 ^a
District of Wildberg, Württemberg	1631	servants	actual wages paid	mean	0.42 ^a
District of Wildberg, Württemberg	1631	servants	actual wages paid	maximum	0.36 ^a
Duchy of Württemberg	1642	servants	wage ordinance	maximum	0.33 ^a
Leonberg, Württemberg	1648	servants	actual wages paid	mean	0.34 ^b
Leonberg, Württemberg	1648	servants	actual wages paid	maximum	0.40 ^b
Schwäbisch Hall	1657	servants	wage ordinance	maximum	0.33 ^c
Bavaria	1688	servants	monastery accounts	maximum	0.40 ^d
Bavaria	1797-8	servants	monastery accounts	maximum	0.40 ^d
England	1388	servants	statute	maximum	0.67-0.69 ^e
England	1444-5	servants	statute	maximum	0.67-0.69 ^e
England	1564-1724	servants	wage assessment	median	0.60 ^f
England	1563-1725	servants	wage assessment	median	0.50 ^g
England	1614	servants	actual wages paid	mean	0.60-0.83 ^h
England	1689	servants	actual wages paid	mean	0.62 ⁱ
Belgium	19C	aged 20-40	calorie consumption: actual	mean	0.73 ^j
World Health Organization	1973	aged 20-40	calorie consumption: recommended	mean	0.64 ^k
USA	20C	soldiers	physical productivity: endurance/own body-weight	mean	0.80-1.00 ^l
USA	20C	soldiers	physical productivity: lifting outside weight	mean	0.50 ^l
USA/Britain	19C	farm workers	physical productivity: farm-work	mean	0.61-0.67 ^h
Biblical Near East	BCE	aged 20-60	value when dedicated to God	mean	0.60 ^m

Sources: ^aOgilvie (2003), 111; HSAS A573 Bü. 5593. ^bHSAS A572 Bü. 56, Nro. 3. ^cDürr (1995), 151. ^dHartinger (1975), 612-13. ^eBardsley (1999), p. 27. ^fKusmaul (1981), 37, 143-4. ^gRoberts (1979), 19; Roberts (1981), 189. ^hBurnette (1997), 270, 275. ⁱCooper, personal communication 2003; Ogilvie (2003), 111. ^jBekaert (1991), 638. ^kSen (1984), 250-1. ^lVogel & Friedl (1992), 93. ^mWoodward (1995), 112.

labour or obtain finer yarn – were subjected to whispering campaigns in the community and prosecuted by the guild.³⁴

Community and guild institutions, through the power they gave employers to fix wages, reduced the potential earnings of dependent workers, particularly women. This in turn reduced such workers' incentives to reallocate time to market work and thus their ability to consume market goods.

A third way social capital affected “industriousness” in Württemberg was through restricting permission to do particular types of work. Women's physical capacities and domestic responsibilities make them more productive, on average, in industrial and service activities than in farming and labouring. But guilds limited women's work in most crafts and trades. All guilds in Württemberg banned female apprentices, denying women formal vocational training.³⁵ A married or widowed woman was forbidden to practise any craft or trade unless her husband held the appropriate guild license, and communal courts enforced guild

³⁴ Ogilvie (1990), 86-8; Ogilvie (1997), 354-5; Ogilvie (2003), 292, 305-08.

³⁵ Ogilvie (2003), ch. 3.

complaints against her if she tried to practise it illegally.³⁶ Even within a master's own household, daughters, other female relatives, and maidservants were excluded from core tasks, as in 1669 when the Wildberg weaver Hannß Schrotter was fined three weeks' earnings by the community assembly because he "set his servant girl behind the loom and had her weave".³⁷

In principle, textile proto-industries created opportunities for women to increase their "industriousness", in relatively low-skilled and physically undemanding work such as wool-combing, yarn-spinning, or warp-making. But even in such cottage industries, guilds reserved all but the most poorly paid auxiliary tasks for male masters, journeymen and apprentices. Weaving itself was forbidden to women other than masters' wives, and females who wove illegally were fined by the guild, along with their male employers.³⁸ Dyeing, too, was the preserve of the dyers' guilds, which excluded all women except for masters' wives and widows, and limited the participation of masters' daughters living at home. Even an auxiliary task such as warp-making was prohibited on pain of a fine of 3-6 *Gulden* (1-2 years' wages for a local maidservant), to protect the livelihoods of guild masters, and "in order that such daughters might be kept to other and necessary domestic tasks and business, or caused to enter into honourable service".³⁹ Guilds in nearly all other crafts and trades imposed similar restrictions. This left spinning, farming, and labouring as the only major employments in which women could work freely.

The economic impact of such institutional constraints can be seen in a database of 2,828 observations of women and men working, extracted from c. 7,000 pages of court records for two Württemberg communities between 1646 and 1800, whose results are summarized in Table 3.⁴⁰ The institutional constraints we have discussed did not prevent women from doing market work, as shown by the fact that less than one-third of all observed work by females was in household production (housework, care, and healing). But the most important market activities for women were not the industrial and commercial occupations most suited to female physical capacities and domestic responsibilities. Rather, they were those that were unguilted, including heavy farm-work and labouring, which together made up nearly one-third of all observed work by females. All industrial sectors combined (craft, proto-industry, spinning, and milling) made up only one-fifth of women's observed work, compared to nearly one-third for men. Within industry, men carried out 90 per cent of guilded activities, women 90 per cent of unguilted ones. It was easier for women to get jobs doing heavy farm work and

³⁶ See the examples in Ogilvie (2008) and Ogilvie (2003), chs. 4-5.

³⁷ HSTAS A573 Bü. 92, fol. 5v, 1.11.1669: "Sein dienst mägdlin ... hindern Stuehl zue sez. vnd weeben zuelaß.". For further examples of such prohibitions, see Ogilvie (2003), 109-15.

³⁸ For examples, see Ogilvie (2004a), 304-7.

³⁹ Troeltsch (1897), 435-53; here article 20, 446: "dergleichen Töchtern zue andern vnd nohtwendigen hauss Arbaiten vnd geschäftten Anzuehallten, oder sich In Ehrliche Dienst einzuelassen verursacht werden".

⁴⁰ For detailed discussion of this database and its results, see Ogilvie (2003, 2004b, 2004c, 2008b).

Table 3:
Observed Work According to Sex and Marital / Household Status, Wildberg 1646-1800 and Ebhausen 1677-1800

Sex and household status	Agriculture		Guilded craft		Guilded proto-industry		Unguilded craft (esp. spinning)		Mill		Tavern		Commerce		Labour		Service		Housework		Care		Healing		Marginal occupations		Total		
	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%	
Daughters	30	22	2	1	3	2	30	22	0	0	0	0	2	1	4	3	2	1	16	12	13	10	0	0	34	25	136	100	
Maids	43	40	0	0	2	2	10	9	2	2	0	0	1	1	0	0	0	0	19	18	15	14	0	0	15	14	107	100	
Wives	81	20	17	4	9	2	34	9	10	3	18	5	12	3	7	2	4	1	111	28	43	11	8	2	43	11	397	100	
Widows	58	33	3	2	11	6	16	9	11	6	5	3	5	3	8	5	5	3	25	14	17	10	6	3	4	2	174	100	
Indep. unmarried women	34	27	0	0	0	0	42	33	0	0	0	0	2	2	5	4	7	6	8	6	14	11	1	1	13	10	126	100	
Unknown status	0	0	0	0	0	0	0	0	0	0	0	0	1	50	0	0	0	0	1	50	0	0	0	0	0	0	0	2	100
Total females	246	26	22	2	25	3	132	14	23	2	23	2	23	2	24	3	18	2	180	19	102	11	15	2	109	12	942	100	
Sons	88	42	26	12	12	6	4	2	12	6	2	1	3	1	7	3	7	3	6	3	3	1	0	0	42	20	212	100	
Male servants	108	50	25	12	4	2	1	0	27	12	2	1	1	0	15	7	1	0	3	1	3	1	0	0	27	12	217	100	
Husbands	405	29	198	14	170	12	8	1	119	8	54	4	56	4	75	5	63	4	58	4	25	2	26	2	146	10	1403	100	
Widowers	6	33	0	0	2	11	0	0	4	22	0	0	0	0	0	0	0	0	3	17	3	17	0	0	0	0	0	18	100
Indep. unmarried men	4	15	1	4	1	4	3	12	1	4	0	0	1	4	1	4	0	0	0	0	1	4	0	0	13	50	26	100	
Unknown status	1	10	0	0	0	0	1	10	0	0	0	0	0	0	0	0	5	50	2	20	0	0	1	10	0	0	10	100	
Total males	612	32	250	13	189	10	17	1	163	9	58	3	61	3	98	5	76	4	72	4	35	2	27	1	228	12	1886	100	
Total persons	858	30	272	10	214	8	149	5	186	7	81	3	84	3	122	4	94	3	252	9	137	5	42	1	337	12	2828	100	

Source: PAW KKP Vols. I-VII (1646-1800); Pfarrarchiv Ebhausen, KKP Vols. I-VII (1674-1800).

Notes:

Agriculture = all forms of agricultural work and commerce.

Guilded craft = all guilded activities except for worsted-weaving.

Guilded proto-industry = making and trading in worsted cloths.

Unguilded craft = spinning, seamstressing, knitting, brewing, attending or holding spinning-bees.

Mill = operating mill, transporting materials to or from mill.

Tavern = operating or serving in tavern.

Commerce = as merchant, shopkeeper, peddler, or private person.

Labour = carting, day-labouring, building, repairing, military work.

Service = teaching, music, writing, magic, housekeeping, laundry, barbering, bathing, prostitution, miscellaneous service.

Housework = indoor and outdoor household chores, providing lodgings.

Healing = as barber-surgeon, physician, Feldscherer, bath man, Kleemeister, shepherd, midwife, sworn woman, private person.

Marginal occupations = doing errands, gathering, stealing.

manual labour than to break into the male preserve of guilded industry.⁴¹ Institutional barriers were thus reflected in economic outcomes. This inevitably stifled market “industriousness” by females, and the market consumption it might have fuelled.

Religious institutions also affected how industrious people could be. Spinners, for instance, sought to minimize their costs by organizing nocturnal spinning-bees (*Spinnstuben*) to share light and reduce tedium. But church elders and male householders used their dominance of communal councils and church courts to outlaw such gatherings, which they regarded as encouraging women to gossip and to illicitly meet male admirers.⁴² Barring spinning-bees increased spinners’ costs, however, as Michel Kuch’s wife pointed out in 1734 to the Ebhausen church court, explaining that “[working] alone she does not earn her lighting costs”.⁴³ Religious prohibitions thus changed women’s incentive to do market work and, in turn, their ability to consume market goods.

Sabbath regulations operated analogously, prohibiting “all business [*Geschäft*] in house and field, inside and outside the village”, not just on Sundays, but also on Saturday nights, Days of Prayer and Repentance, and other holy days.⁴⁴ Existing community officials such as constables, watchmen, and gate-wards were adjured to keep a diligent eye out for Sabbath work,⁴⁵ and special officers called *Kirchenrüger* were appointed by the communal church courts to patrol the streets, carry out internal inspections of suspect households, and

Table 4:
Prosecutions for Sabbath Work in Community Church Courts,
Wildberg 1646-1800 and Ebhausen 1674-1800

	Total Cases	Percent Female
Village or town location		
Villages	547	24
Towns	665	16
Unknown	2	0
Quarter-century		
1646-1673	212	19
1674-1700	298	16
1700-1724	352	24
1725-1749	223	19
1750-1774	111	18
1775-1799	18	11
Total	1214	19

Note: First two 'quarter-centuries' are defined with respect to beginning-dates of church-court records for Wildberg (1646) and Ebhausen (1674) respectively.

Sources: PAW KKP Vols. I-VII (1646-1800); Pfarrarchiv Ebhausen, KKP Vols. I-VII (1674-1800).

⁴¹ Ogilvie (2003), 320-52.

⁴² Discussed in Medick (1984); Ogilvie (2003), 29, 31, 116, 118, 121-3, 126, 166, 184-5, 208, 241, 274, 277, 284, 313; Ogilvie (2004b), 355.

⁴³ PAE KKP, Vol. III, fol. 178r, 28.2.1734: “weil sie alleine das liecht nicht verdiene”.

⁴⁴ PAE KKP, Vol. V, 6.5.1759, p. 111: “alles Geschäft zu Haus- und feld, inn und außer dem flecken”; see also PAE KKP, Vol. II, fol. 121v, 2.3.1714.

⁴⁵ PAW KKP, Vol. I, fol. 204r, 18.11.1659.

“eavesdrop among the houses”.⁴⁶ Ordinary citizens who failed to report neighbours’ Sabbath work were punished.⁴⁷

Complaints in local records show that Sabbath prohibitions were binding constraints on rural people who wanted to allocate more time to market production.⁴⁸ As Table 4 shows, between 1646 and 1800 the communal church courts of two small Württemberg communities penalized more than 1,200 cases of people working at prohibited times.⁴⁹ This was one way social institutions restricted male industriousness more than female, since 81 per cent of those prosecuted were male.⁵⁰ Sabbath work regulation seems actually to have increased up to c. 1750, and even in the 1750-75 period was still more intense than a century earlier. Only after 1775 did it begin to die down, and not until October 1799 did the central government proclaim that “on what have hitherto been holy days, church services shall now be held only in the mornings, and outside those hours it shall be permitted to pursue occupations, businesses, and trades, both before and after the church service”.⁵¹ Throughout the period of the Industrious Revolution, therefore, local religious institutions limited people’s capacity to intensify their industriousness.

This is not to say that all early modern European societies were like Württemberg. Many parts of central, eastern-central and Nordic Europe did resemble Württemberg, in seeing church, state, and community institutions collaborating to intensify “social disciplining” – including economic regulation – between 1600 and 1800. But in other European societies – particularly, but not exclusively, on the north Atlantic seaboard – social disciplining, where it existed at all, was only sporadically enforced.⁵² Guilds, too, were strong and omnipresent in many European economies to the end of the eighteenth century. But in England and the Netherlands they regulated fewer occupations, were lacking in many towns and villages, and liberalized their entry barriers and internal regulations progressively between 1650 and 1800.⁵³ Local communities, as well, varied across Europe in their power

⁴⁶ PAW KKP, Vol. V, fol. 341v, 17.2.1717: “unter den häusern zu horchen”.

⁴⁷ For an example, see PAE KKP, Vol. II, fol. 34r, 12.8.1706; PAE KKP, Vol. VI, fol. 31r, 5.11.1777. On the legal obligation in German communities to report known offences or risk punishment, see Dürr (1995), 247-8; Thumm (1971), 218-21, 245-6; Robisheaux (1989), 95-116; Ulbrich (1999), 243.

⁴⁸ See, for instance, PAE KKP, Vol. II, fol. 46v, 16.9.1708; PAE KKP, Vol. II, fol. 61v, 24.1.1710; PAE KKP, Vol. II, fol. 146r, 31.1.1716.

⁴⁹ Ogilvie (2003), 25 (Table 1.2).

⁵⁰ Ogilvie (2003), 24.

⁵¹ PAW KKP, Vol. VIII, fol. 118v, 11.10.1799: “an den bißherigen Feyertagen nur am Vormittag Gottesdienst gehalten auser deßen Stunde aber erlaubt werden solle, sowohl vor als nach dem Gottesdienst dem berufs Geschäfte und gewerbe nachzugehen”.

⁵² For comparative discussion of “social disciplining” and detailed references see Ogilvie (2006), 70-4.

⁵³ On English guilds, see Clark / Slack (1976), pp. 29, 108-09, 116; Coleman (1977), pp. 73-5; Wallis (2008); Ogilvie (2007b), 46-8, 50; Ogilvie (2008a). On guilds in the Low Countries, see De Vries / Van der Woude (1997), esp. pp. 162-3, 293, 298, 301-02, 340-1, 357, 582, 634, 638; Soly (2006), pp. 15-16; De Munck (2008); Davids (1996); Davids (2003); Ogilvie (2007b), 48-50; Ogilvie (2008a).

and desire to control women's residence, work, wages, and sociability.⁵⁴ The scholarship on "social disciplining", guilds, communities, and women's history all converge in observing an earlier and more thorough relaxation of institutional controls in the Netherlands, England, northern France, and a few other enclaves, than in central, eastern or southern parts of the continent. The Industrious Revolution could proceed more easily where "social capital" relaxed, creating institutional interstices in which deviations from norms could be experimented with – particularly by women – and new work norms could be formed.

2. Social Capital and Commerce

The Consumer Revolution not only needed people to shift into market work and earn more spending money. It also needed the commercial sector to reduce transaction costs and bring new market wares within the reach of wider social strata. This certainly corresponds with what we know of early modern England and the Netherlands, where shops, stalls, hawkers, and peddlers proliferated alongside established merchants, lowering the transaction costs of indulging in new market wares.⁵⁵ But what happened where commerce was not so open? For centuries, European merchants had formed entrenched interest-groups adept at securing legal privileges from the political authorities to block new participants and competitive practices in commerce. Did these institutional privileges simply melt away in the heat of the Consumer Revolution?

Unfortunately, commercial change did not prove straightforward everywhere in Europe. Württemberg provides an instructive example. Until the nineteenth century, trade in most agricultural and industrial goods was legally reserved for their immediate producers. Middlemen (and -women) were prohibited as *Fürkäufer* (regraters).⁵⁶ Trade in craft inputs was reserved for the relevant guild masters, and "encroaching" middlemen were penalized. The export of certain wares (e.g., proto-industrial textiles) was reserved for members of privileged merchant associations with state monopolies. Specialized commerce was restricted to a specified list of "merchants' wares" and was reserved for members of the guilds of merchants and shopkeepers, plus a few outsiders who managed to secure guild permits or princely dispensations (*Konzessionen*); these licenses were only granted upon payment of a fee and if adjudged to "correspond to the needs of the community".⁵⁷

⁵⁴ Women's position in different early modern European economies is considered in Ågren and Erickson (2005); Ogilvie (2003); Van den Heuvel (2007); Van Nederveen Meerkerk (2006); Brewer and Vickery (2006). On the varying strength and impact of communal institutions on women, see Ulbrich (1999); Ogilvie (2006)

⁵⁵ See the discussions in De Vries (2003), 61-2; De Vries (2008), 169-77, 180; Blondé, Briot, Coquery and Van Aert (2005); Blondé and Van Damme (2006); Van den Heuvel (2007), 177-81, 270-3.

⁵⁶ See the prohibitions against "regrating" in HSTAS A304 Bü. 968, fol. 68r-72r (19.12.1763).

⁵⁷ See Weisser (1780), 329-30; Ogilvie (1997), 70-9; Sabeau (1990), 160. Quotation from "Revidirte allgemeine Gewerbe-Ordnung" (5 Aug 1836), in Reyscher (1828ff), Vol. 15.2, art. 114.

These were not just formal regulations but were enforced in practice. Into the later eighteenth century, those who bought up foodstuffs for resale were not regarded as reducing transaction costs but rather were prosecuted as black-market “regraters” encroaching on the privileges of local farmers and guildsmen. In 1764, for instance, the Wildberg community assembly was mobilized by a local baker who complained that “the so-called *Schmalzin* [lit. “Lard-Woman”] is buying up grain here and there, and selling it again at a higher price on offer to the citizens here, and through this *commercium* is causing damage to the bakers here”.⁵⁸ In 1793, likewise, five Wildberg citizens separately made use of the community assembly to complain that “in Liebelsberg and Schönbronn, lard is being bought up by a *Fürkaufferin* [female regrater] from Teinach”. Local officials immediately sent out written reminders to all surrounding communities about the illegality of regrating, urged citizens to report every illegal middleman or -woman instantly, and instructed officials in the woman’s locality to “warn her against further regrating and the penalties it involves”.⁵⁹

Guilds and merchant associations also restricted competition and innovation in commerce. Between 1650 and 1797, the 20-40 merchants of the powerful Calw Worsted Trading Association prevented non-members from introducing new worsted varieties that would circumvent the association’s state privileges. When the merchants tried to introduce innovations themselves, the weavers’ guilds blocked them, as in 1698 when the Wildberg guild lobbied against several merchants “who have begun to make new sorts of *Schlickh Cadiß* [lit. warp-worsted], and put them out to be woven, which they are not allowed to do”.⁶⁰ Together, the weavers’ guilds and the merchants’ association hindered the introduction of innovative worsted varieties into the Württemberg market long after they had become widespread in guildless worsted industries in England, the Netherlands, and France.⁶¹

In many other crafts, too, guilds erected barriers to simple commercial innovations such as peddling, which reduced transaction costs. A Wildberg nail-smith, for instance, complained in 1742 that a village woman was encroaching on his guild privileges by peddling nails, and got her jailed by the communal assembly.⁶² In 1784 a guilded tawer complained that “the peddling of Jews with hides is getting so out of hand that no tawer can sell anything

⁵⁸ HSTAS A573 Bü. 95, fol. 28v, 17.12.1764: “die sogenannte Schmalzin Kauffe hin und wider fruchten auf, verkauffe solche wider in einem höhern Pretio auf beutt an die hiesige burgere und verusche durch dises Commercium ... denen hiesigen becken einem Schaden”; for the plainant’s occupation, see PAW Bd. 7, Eheregister, 31.10.1753.

⁵⁹ HSTAS A573 Bü. 100, fol. 37r, 1793: “in Liebelsperg und Schömbronn werde das Schmalz durch eine Fürkaufferin aus deinach ... aufgekauft”; “vor weiterm Aufkauf und der darauf gesezten Strafe”.

⁶⁰ HSTAS A573 Bü. 851 (1698-9), fol. 25r-v: “alß welche Neüe Sortten von Schlickh Cadiß angefangen Zumachen, und zuweben geben, dessen Sie aber nicht befuegt gewesen”.

⁶¹ Ogilvie (2004a), 314-22; Troeltsch (1997), 84-6, 119, 142-3, 151-2, 161-9, 189-90.

⁶² HSTAS A573 Bü. 95, fol. 6v, 25.1.1742.

any more”, and secured prohibitions by the communal assembly and the district authorities.⁶³ In 1787 a guilded weaver complained that “through the peddling of the Jews he and other craftsmen are suffering much interference and weakening of their livelihoods”. His complaint led the community assembly to threaten a 20-*Reichstaler* fine to anyone buying from Jews.⁶⁴

Even for legitimate “merchants’ wares” that were not the exclusive privilege of local farmers or craftsmen, shopkeepers’ guilds often blocked new commercial practices.⁶⁵ Peddling and hawking were banned altogether, and shopkeepers mobilized their own guild officials, communal courts, and state institutions to prevent any encroachment on their monopolies.⁶⁶ In 1652, for instance, a poor labourer’s widow in Wildberg was only granted a princely dispensation to open a corner shop on the grounds that her sole son was a cripple, she was supporting four younger daughters from alms and ribbon-weaving, and the local princely bureaucrat himself guaranteed that she and her son would “sell nothing other than the ribbons they themselves make, kindling wood, and such poor things, so the shopkeepers will suffer no injury or encroachment”.⁶⁷ It was far more typical for communal and state officials to support the objections of the shopkeepers’ guilds against new retailers and competitive practices. In 1711, for instance, the Württemberg Ministry of the Interior ordered district governors to report all licensed shopkeepers in their districts. Sixty-five lists were duly delivered, along with details on how illegal retailing was being controlled. To give just one example, Maria Christothora Weysin, a converted Jew’s widow in Pfaffenhofen, could not show any princely dispensation or guild permit, “for which reason, upon the complaint of the aforementioned two [guilded] shopkeepers, she was prohibited and ordered to refrain from this encroachment until she presents a legitimate princely order”.⁶⁸ Shopkeepers’ guilds also used community institutions to defend themselves against new entrants and commercial practices, as in 1784 when two members of the merchants’ and shopkeepers’ guild complained in the Wildberg community assembly that “the Jews and itinerant rural traders are committing great interference against the merchants, through their prohibited peddling”. The assembly immediately ordered all citizens “to report rural traders, Jews and other persons trading counter to [the national law-

⁶³ HSTAS A573 Bü. 95, fol. 22v, 2.1.1784: “das Hausiren der Juden mit fell nehme so sehr überhand, daß ein Weisgerber nichts mehr verkaufen könne, er bitte also um ein Verbott”.

⁶⁴ HSTAS A573 Bü. 99, fol. 67v, probable date April 1787, #197 and #198: “durch das Hausiren der juden geschehe seinem und anderm Handwerkern viel Abbruch und Schwächung der Nahrung, Er bitte, solcher abzustellen”.

⁶⁵ “Revidirte allgemeine Gewerbe-Ordnung” (5 Aug 1836), in Reyscher (1828ff), Vol. 15.2, esp. Abschnitt 3, art. 106-14.

⁶⁶ Ogilvie (2003), 167-72, 263-5.

⁶⁷ HSTAS A573 Bü. 1149, fol. 32v-33v, 16.7.1652: “vnd auch den Krämerey., Sintenmahlen Sie nichts Alß selbstmachende bändlen schwevelhölzlen vnd derogleich. schlechte Sach failh zue haben v.mag, Kein schad od. eingriff gethan würde”.

⁶⁸ HSTAS A228 Bü. 713 (1711), #20 (Amt Güglingen): “dahero auf vorbemellt- Beeder Crämern Beschwehren, diese Stimpelej, biß auf beybring: und Legitimierung gndst: Befelchs. Ihro Nidergelegt und Verbotten word.”

code] to the district authorities” and instructed the district excise-officer and the village authorities to watch out for violators.⁶⁹

As such complaints illustrate, a black-market “informal sector” existed, in which low-cost traders illegally congregated. Thus, for instance, in 1711 the guilded shopkeepers of Bottwar sought to outlaw “the hedge- or barn-retailers ... who have not been apprenticed to the trade anywhere, whose wives and children beg, and who hold community citizenship in no locality, but with their retailing are very burdensome and cause great curtailment to the public and to the entire trade”.⁷⁰ The guilded shopkeepers of Backnang sought to bar Italian peddlers who “sell spices which they have not got inspected by anyone, and almost more cheaply than the shopkeepers here can purchase them in Frankfurt”. The Backnang guild also objected to married women selling soap and other washing products at weekly markets “without being able to show any permits to do so”.⁷¹ Poor women and gypsies traded for illegal trinkets, as in 1780, when Agnes Dorothea Lampart from the village of Ebhausen visited a tavern to “order a bunch of garnets [from a gypsy], on commission for a female relative”.⁷² Poor women traded in “gathered” goods whose sale was not reserved for farmers or craftsmen, as in 1798 when the 32-year-old Elisabetha Walburge Luz, daughter of a deceased tailor from Mühlheim am Neckar, was living as a lodger in Ebhausen and explained how she “had inherited 150 *Gulden* from her parents, of which she had almost all invested in trade ... she was trading in nuts and the like”.⁷³ But the fact that women, gypsies, migrants, Jews, and foreigners proliferated in such “peripheral” sectors – uninspected spices, soap, illegal trinkets, nuts – and locations – hedges, barns, taverns, lodgings – is itself an indication of how non-guilded, low-cost traders were excluded from core commercial activities.

It is sometimes claimed that guild regulations were easy to circumvent and had no real economic effect. If this were true, one should observe no quantitative difference in economic outcomes between societies where retailing guilds were ubiquitous and strong and those where they were scattered and weak. In most German territories, retailing guilds

⁶⁹ HSTAS A573 Bü. 95, fol. 6r-v, 22v, 2.1.1784: “die Juden und vagirende Land-Krämer machen denen Handels Leuten durch verbottenes Hausiren in der Stadt und auf denen Amts Orten grossen Abbruch. Er bitte also, diesem zusteuren”; “das Hausiren der Juden mit fell nehme so sehr überhand, daß ein Weisgerber nichts mehr verkaufen könne, er bitte also um ein Verbott”; “die Land Krämer, Juden und andere darwider handelnde Personen dem OberAmt anzuzaiigen”.

⁷⁰ HSTAS A228 Bü. 713, #6, 20.11.1711: “Hackhen: oder Schewren Krämmern, ... welche die handlung Nirgents Erlehnnet, deren Weiber und Kinder Bettlen, und an Keinem ohrt Verburgert sein; doch darneben mit Ihrem Cramm, dem publico, alß den gesampten Handlung sehr beschwehrlich und großen abbruch thun.”

⁷¹ HSTAS A228 Bü. 713, #10, 7.10.1711: “so doch Keine Erlaubniß vorzue weißen Hatten”; “so Ihme niemalen beschauet würde Verkaufte, vnd selbiges fast wohlfailer geben, alß Sie di Hießige Krämer es in Franckhfurth, im Ankauff erhielten”.

⁷² PAE KKP, Vol. VI, fol. 96v, 17.7.1780: “daß sie bey einem auf Commission einer base einen Reyhen Granaten bestellt habe”. On sumptuary prohibitions against the wearing even of modest garnet and coral ornaments by villagers, see HSTAS A21 Bü. 224 (1712), provisions for social classes 7-9.

⁷³ PAE KKP, Vol. VIII, p. 134, 13.8.1798: “150 f hab sie von ihren Eltern erhalten, die sie jezt gröstentheils in Handel steken habe ... Sie habe mit Nuß u. d.gl. gehandelt”.

survived at least until c. 1800 – in territories such as Württemberg until 1862 – and erected high barriers to entry which they policed quite strictly. In the Netherlands and England, by contrast, retailing guilds were not universal; those that survived progressively liberalized from the seventeenth century on, reducing their barriers to entry and increasingly admitting women, migrants, and even Jews.⁷⁴

The commonest quantitative benchmark of the Commercial Revolution is the “retail ratio”, the number of retailers per 1,000 inhabitants. Table 5 shows retail ratios calculated for 308 European settlements between 1542 and 1911 – 77 for Württemberg, 113 for other German territories, 48 for the Northern Netherlands, 13 for the Southern Netherlands, and 57 for England. The ratios for Germany, despite often combining retailers with merchants, are lower than those for the Netherlands and England, which generally include only retailers. Low retail ratios of less than 5 per 1,000 were observed in 85 per cent of the Württemberg sample and over one-third of the sample from other German territories, but hardly ever in the Netherlands and England. Conversely, high retail ratios of over 15 per 1,000 were observed in over two-thirds of the samples for England and the Netherlands, but less than one-tenth of those in Württemberg and other German territories. In England and the Netherlands,

Table 5:
Retail Ratios by Country, 1542 - 1911

Retail ratio	Württemberg		Other Germany		Northern Netherlands		Southern Netherlands		England		All Countries	
	no.	%	no.	%	no.	%	no.	%	no.	%	no.	%
Zero	16	21	13	12	1	2	0	0	0	0	30	10
0 - 5	49	64	28	25	1	2	0	0	0	0	78	25
5 - 10	7	10	37	33	5	10	2	15	5	9	56	18
10 - 15	0	0	24	21	6	13	1	8	13	23	44	14
15 - 20	2	3	7	6	3	6	0	0	11	19	23	7
20 - 25	0	0	2	2	13	27	1	8	7	12	23	7
25 - 30	2	3	1	1	5	10	1	8	6	11	15	5
Over 30	1	1	1	1	14	29	8	62	15	26	39	13
Total	77	100	113	100	48	100	13	100	57	100	308	100
mean	3.65		7.74		22.90		31.51		22.71		12.85	
median	2.05		6.80		23.14		36.32		19.23		8.83	
max	31.25		34.52		41.62		62.50		53.19		62.50	
min	0.00		0.00		0.00		6.45		7.11		0.00	
std. dev.	6.13		6.13		10.87		16.12		11.44		12.43	

Notes:

Retail ratio = number of retailers per 1000 inhabitants.

Most retail ratios for Württemberg and Germany include merchants as well as retailers.

Most ratios for England, Northern Netherlands, and Southern Netherlands exclude merchants.

Dataset consists of 308 individual cities, towns and villages; it excludes observations of larger zones.

Sources: Dataset under construction from a variety of archival documents and secondary works.

⁷⁴ On retailing guilds in the Northern Netherlands, see Van den Heuvel (2007); on the Southern Netherlands, see Blondé and Van Damme (2006); for comparisons with England, see the essays in Blondé, Briot, Coquery and Van Aert (2005).

settlements without retailers were almost non-existent, whereas they comprised one-fifth of the Württemberg sample and over one-tenth of the sample from elsewhere in Germany.

Of course, differences in retail ratios among countries might result from differences in other factors. For instance, as Table 6 shows, the settlements in the sample varied greatly not just in their retail ratios but in their dates of observation and their population sizes.

Table 6:
Dataset of European Retail Ratios: Descriptive Statistics

Variable	N	Mean	Median	Max	Min	Std. Dev.
Retail ratio	308	12.9	8.8	62.5	0.0	12.4
Population	308	14342.3	1581.5	650000	55	52723.5
Log of population	308	7.8	7.4	13.4	4.0	1.7
Date	308	1769.6	1785	1911	1542	68.9

Note: Retail ratio = number of retailers per 1000 inhabitants.

Sources: Dataset under construction from a variety of archival documents and secondary works.

Perhaps the German settlements had lower retail ratios because they were observed at earlier dates or included fewer large cities? What happens when we control for these variables?

Table 7 reports the results of a Tobit regression with the retail ratio as the dependent variable and population, date and country as explanatory variables. Settlements with larger populations had higher retail ratios, confirming that commercialization was associated with

Table 7:
Determinants of European Retail Ratios, 1542 - 1911: Tobit Regression

Explanatory variable	Coefficient	Marginal effect (at sample mean value)
Log of population	2.202*** (0.000)	1.649*** (0.000)
Date	0.027*** (0.000)	0.020*** (0.000)
England	15.209*** (0.000)	13.055*** a (0.000)
Other Germany	3.590*** (0.001)	2.740*** a (0.001)
Northern Netherlands	18.207*** (0.000)	16.006*** a (0.000)
Southern Netherlands	22.099*** (0.000)	20.476*** a (0.000)
Constant	-61.402*** (0.000)	
Number of observations	308	

Notes:

Dependent variable is retail ratio (number of retailers per 1000 inhabitants).

For country-dummies, base category is Württemberg.

Robust p values in parentheses

* significant at 10%; ** significant at 5%; *** significant at 1%

^a Effect of discrete change of dummy variable from 0 to 1.

urbanization.⁷⁵ And, as one might expect, commercialization increased during the early modern period. But even controlling for urbanization and the passage of time, the country differences remain large and significant. There was no significant difference in retail ratios among England, the Northern Netherlands, and the Southern Netherlands. But Württemberg and other German territories had significantly lower retail ratios than England and the Netherlands. Economic outcomes thus differed significantly between societies where retailing guilds were strong and those where they were more liberal.

The period after 1650 did see a vast expansion of retailing in the Netherlands and England, lowering transaction costs and bringing market wares within the budgets of poorer consumers.⁷⁶ But this did not take place everywhere, as shown by this large sample of retail ratios. In many parts of Europe, permission to engage in commerce (as well as what one could do once one had it) was inhibited by the social capital of institutionalized interest-groups.⁷⁷ Such institutional restrictions hindered the commercial innovations needed to open up market consumption to broader, poorer social strata.

3. Social Capital and Sumptuary Regulation

The Consumer Revolution not only needed more market workers with more disposable income, and retailers offering lower transaction costs. It also needed market consumption to become socially acceptable. During the Consumer and Industrious Revolutions in the Netherlands and England, contemporaries described social norms as decisively shifting toward consuming in the market – buying clothes and household furnishings rather than making them oneself, purchasing comestibles at shops and taverns rather than preparing them at home.⁷⁸ In this story, new consumption norms arose spontaneously through the aggregated choices of individuals in households and markets, with other social institutions playing no role. Accurate though this picture may be for England and the Netherlands, can we apply it unquestioningly to other early modern societies?

Studies of early modern “social disciplining” suggests not. In many European societies, the seventeenth and eighteenth centuries saw an intensification of efforts to regulate people’s private lives, including their consumption choices.⁷⁹ Accounts of the Consumer Revolution in the Netherlands and England portray such “sumptuary” regulation as emanating

⁷⁵ Although many rural settlements also commercialized in this period, as pointed out by De Vries (2008), 93-5, 128.

⁷⁶ De Vries (2003), 61-2; De Vries (2008), 169-77.

⁷⁷ See the comparative discussions in Van den Heuvel (2007); and in Blondé, Briot, Coquery and Van Aert (2005).

⁷⁸ De Vries (2008), esp. 123-77.

⁷⁹ For recent surveys, see Landwehr (2000); Ogilvie (2006).

solely from the central state, losing force by 1650 at latest, and lacking real economic impact even before that time.⁸⁰ The early modern Netherlands were certainly remarkably free of sumptuary laws, and England enacted none after 1604.⁸¹ But evidence from other European societies – including Germany, Austria, Switzerland, Scandinavia, Spain, Italy, and even France – indicates that sumptuary regulations survived long past 1650, were supported by many non-state institutions, and were enforced in practice, albeit selectively according to the interests of the social groups that endorsed them.⁸² In German-speaking Central Europe, for instance, at least 1,350 ordinances were issued between 1244 and 1816 regulating clothing alone, which in turn comprised only one aspect of consumption. Württemberg promulgated sumptuary ordinances into the late eighteenth century, and Bavaria issued the last sumptuary law in Central Europe as late as 1818.⁸³ Local elites shaped and enforced these sumptuary controls, and often resisted their ultimate abolition.⁸⁴

Württemberg provides an instructive case-study of how sumptuary controls interacted with the Consumer Revolution. Like many early modern European societies, Württemberg issued numerous sumptuary regulations throughout the seventeenth and eighteenth centuries, responding to pressure from different social groups. Higher social strata demanded sumptuary rules to demarcate their status vis-à-vis lower strata: courtiers over non-courtiers, townsmen over villagers, the communal *Ehrbarkeit* (notability) over families ineligible for local office. Men demanded regulation of women's dress to define gender-specific conduct, prevent sexual disorder, and help them resist wives' and daughters' demand for new fashions. Employers demanded regulation of servants' dress to reduce their temptation to demand higher wages. Guild masters demanded regulations to reserve exotic wares to small groups of rich consumers, require ordinary people to wear domestically produced textiles and furs, and protect their own markets against foreign competition. Churchmen and local elders demanded regulations to restrain worldly adornment, lavish sociability, drunkenness, and sexual display. Princely councillors, tax-collectors, bureaucrats, and military men demanded sumptuary regulations to make ordinary people spend less on themselves so they could pay more in taxes. This conglomeration of social pressures gave rise in Württemberg, as in many other European societies, to a continual flow of sumptuary regulations between the mid-sixteenth and the later eighteenth century.⁸⁵ The main targets were “finery in clothing and excess in

⁸⁰ De Vries (2003), 65-6; Harte (1976), 148.

⁸¹ Hooper (1915), 448-9; Hunt (1996), 34, 40; Ross (2006), 385-6.

⁸² Belfanti and Giusberti (2000), 359-61; Bulst (1993), esp. 32-8; Fairchild (2000), esp. 420-1; Freudenberger (1963), 37, 40, 43, 46, 48; Hunt (1996), 17-41; Moyer (1996), esp. 231-6, 244-336; Roche (2000), 203-04, 279.

⁸³ Bulst (1993), 32-4.

⁸⁴ See Bulst (1993), 45-6; Moyer (1996), esp. 244-336.

⁸⁵ For a representative selection, see “Erste Polizei-Ordnung” (30.6.1549), in Reyscher (1828ff), Vol. 12, 149-67, here 151-3; “Zweite Polizei-Ordnung” (28.10.1644), in *ibid.*, Vol. 13, 41-5; “Fürstl. Befehl in Betreff der durch den Schwäb. Kreis festgesetzten Taxen und Regeln für Dienstboten und

eating and drinking” – precisely the new forms of market consumption implied by the Industrious Revolution.⁸⁶ As in many European societies, sumptuary regulation became ever more elaborate into the eighteenth century, alongside the local administrative machinery for its implementation, and was only abolished at the end of the Ancien Régime.⁸⁷

Local archival sources show these sumptuary norms being enforced – not perfectly, but enough to affect people’s economic choices. Community and church bodies not only issued normative exhortations against luxury and excess, but underpinned them with a surprisingly intensive everyday regulation of two specific *types* of consumption – clothing and comestibles.⁸⁸ When prepared in the household, most garments and comestibles were acceptable; when purchased outside the household they were monitored, reported and penalized.

Sartorial regulation was seriously pursued by local religious and communal institutions in Württemberg from the later seventeenth century on. In 1660, the communal church court in Wildberg appointed “censors” to monitor “the excessive sartorial display that has got out of hand”.⁸⁹ From that time on, it was not exceptional for local church courts to admonish offenders by name and penalize them for sumptuary violations. To give just a few examples, in 1662, the Wildberg court reprimanded the son of a local weaver, “on account of very wide trousers, which fashion it is unfitting for him to wear”, fined him 15 *Kreuzer* (about 2 weeks’ earnings for a male servant), and warned him that “if he should again put on such trousers of this fashion, they shall, by virtue of the Princely Command, be confiscated”.⁹⁰ In 1684, the Wildberg court ordered Hans Caspar Cuenz’s wife “to take off the neckerchief she had been wearing, because she is not permitted to wear it, and to set a good example to

Handwerkern” (15.05.1652), in *ibid.*, Vol. 13, 114-23, esp. 120; “Dritte Polizei-Ordnung” (08.10.1660), in *ibid.*, Vol. 13, 423-35; “Vierte Polizeiordnung” (17.12.1681), in *ibid.*, Vol. 13, 577 with note 635; “Fünfte Polizei-Ordnung” (6.12.1712), in *ibid.*, Vol. 13, 921-6; “Erläuterung der Polizei-Ordnung” (2.5.1713), in *ibid.*, Vol. 13, 759 with note 1002; “General-Ausschreiben: erinnert an die genaue Beobachtung der Polizei-Ordnung” (17.7.1714), in *ibid.*, Vol. 13, 1023; Zweite Trauerordnung” (20.8.1720), in *ibid.*, Vol. 13, 1182-5; “Verbot des Tragens von Hof-Livrée durch solche, die nicht bei Hof dienen” (18.04.1721), in *ibid.*, Vol. 13, 1217 with n. 1199; “Verbot des Tragens von grünen Kleidern und Hirschfänger durch Andere, als Forstbediente” (29.03.1727), in *ibid.*, Vol. 14, 1 with n. 2; “General-Rescript in Betreff der Unbefugten Nachahmung von Uniform-Kleidern und Farben” (6.9.1731), in *ibid.*, Vol. 14, 91-3; “Generalrescript, betreffend die Beförderung der Religiosität und Sittlichkeit” (13.1.1739), in *ibid.*, Vol. 14, 220-31, esp. article 16 (230); “Vierte Trauer- und Leichentax-Ordnung” (24.4.1784), in *ibid.*, Vol. 14, 997-1015, esp. articles 4-8 (1000-2).⁸⁶ “Fünfte Polizei-Ordnung” (6.12.1712), in Reyscher (1828ff), Vol. 13, 921-6, quotation from 921.

⁸⁷ On Württemberg, see Medick (1996), 384-91; Bischoff-Luithlen (1982), 95; Benschmidt (1985), 34-6, 226-30. On Germany more widely, see Bulst (1993); Knudsen (2002), 38-42, 52-8; on France up to c. 1750, see Moyer (1996), 244-336.

⁸⁸ For an example from Wildberg, see HSTAS A573 Bü. 94, Vogt-Rug-Gericht, 08.05.1710, Zettel between fols. 8 and 9; for similar exhortations in another Württemberg community later in the eighteenth century, see Medick (1996), 299.

⁸⁹ PAW KKP, Vol. II, fol. 18r, 14.12.1660: “daß überhand genommene ... Klaid. Pracht”.

⁹⁰ PAW KKP, Vol. II, 3.10.1662, fol. 66r: “wegen getragener sehr weiter hosen, welche manier zu tragen Ihme nicht gebührt”; “wann Er solches hosen, vff diser manier widerumb anziehen solte, selbige crafft Frst: bevelchs confiscirt werden sollen”.

others”.⁹¹ In 1708, the Ebhausen church court admonished and penalized a proto-industrial worsted-weaver’s wife for wearing ostentatiously large neckerchiefs.⁹²

It might be argued that such prohibitions were merely futile gestures in the face of an ineluctable Consumer Revolution, were it not for the fact that people at the time took them quite seriously. Sumptuary penalties were regarded as forms of public shaming, important enough to motivate social resentments and enduring conflicts. In 1682, for example, the local church court forbade the Wildberg barber-surgeon’s wife “to wear the prohibited clothing which violates the most recently published regulatory ordinance”, and threatened to report her to the central state authorities if she continued.⁹³ The barber-surgeon himself was

summoned to the Town Hall, where several women had also been summoned on account of the clothing-ordinance, [and] Mr Pastor, in front of the women who were present, inspected him [the barber-surgeon] behind and before, and said that the small ribbon which he had on the collar of his coat also had to come off, and declared that they [the women] will themselves soon go down, and slapped his hand on the clothing-ordinance.

The barber-surgeon declared in court that he “took all of this as a contumely, because it was discussed again and again among the people in the town”.⁹⁴ This conflict over ribbon on the barber-surgeon’s collar, trivial though it might seem, gave rise to a feud in the community between the associates of the pastor and the surgeon, which lasted for nine years, occupied three communal court sittings, and issued in several reports to the princely authorities.⁹⁵

In a similar way, a sermon against luxurious dress delivered by the Ebhausen pastor in 1708 was perceived by Magdalena, the wife of Peter Schöttlin, as an attempt to shame her publicly. Magdalena had already been twice forbidden to wear “her excessively large neckerchief, which she is accustomed to wearing above her station”. She reacted to the pastor’s public reprimand by remarking to a group of neighbours a few days later that “if the pastor doesn’t have anything better to preach about than neckerchiefs, he could well refrain from doing it altogether”. She was then summoned before the community church court, where she denied being rude about the sermon but again refused to take off the neckerchief,

⁹¹ PAW KKP, Vol. IV, fol. 252r, 18.1.1684: “ist vnder sagt worden, Ihre tragende hals tücher, weil es Ihnen nicht gebührt zuetragen abzulegen, Vnd andern mit einem Exempel vorzuegehen”.

⁹² PAE KKP, Vol. II, fol. 46r, 15.7.1708.

⁹³ PAW KKP, Vol. IV, fol. 215r, 5.5.1682: “die verbotenen Klaidler welche der Jüng. publicierten Policey Ordnung zue wider ... ablegen thüe”.

⁹⁴ PAW KKP, Vol. IV, fol. 221v, 7.6.1682: “Er vff daß Rathhauß er fordert: da etliche weiber wegen deß Klaidler Tax, auch vor beschaid. word. habe herr Specialis vor denen anweßened. weibern Ihne hind. vnd vornnen besichtigt vnd gesagt die Schnierlen, so Er vff dem vmbschlag Seines rockhs gehabt, müieß. auch herab, warüber Er vermeldt, Sie werd. selbsten baldt herab gehen, In deme Sie abgetrag. werd., vnd vff die Klaidler Ordnung die hand geschlagen, welches Er vor einen Spott [ins.: weil solches hin vnd wider in der Statt vnder den leüthen auß gesagt word.] vffgenommen”.

⁹⁵ PAW KKP, Vol. IV, fol. 215r, 5.5.1682; PAW KKP, Vol. IV, fol. 220r-222v, 7.6.1682; PAW KKP, Vol. V, fol. 100v-103v, 19.4.1691.

whereupon the church censors fined her 11 *Kreuzer* – more than a day’s average earnings for a local worsted-weaver.⁹⁶

When exhortations, sermons, public reprimands, court hearings, gossip, fines, and confiscation did not succeed, communities resorted to heavier penalties. People who violated the clothing regulations could find themselves or their families denied communal welfare. In 1687, for instance, when Jacob Zeyher’s widow petitioned for poor relief, the Wildberg church court refused, on the grounds that “this Zeyherin’s son and daughter have let themselves be seen in clothing above what is fitting and this implies that they can probably come by other means and can support their old mother, for which reason her children are reminded to care for their mother in accordance with filial obligation”.⁹⁷ In 1703, the Ebhausen community church court summoned the “house-poor people” in the village so that a list could be drawn up for the district authorities, but took advantage of having the village poor assembled before them, by “additionally giving severe warnings to various widows, that they shall refrain from the loose gossip and other disgraceful trouble-making that has hitherto occurred among them, especially at spinning-bees, and also from excessiveness in clothing”.⁹⁸ For this group of women, poor relief was tacitly made dependent on refraining from two manifestations of the Industrious Revolution – working at spinning-bees and buying new clothes.

Sumptuary regulations were thus enforced at least sufficiently to provide an instrument for “social disciplining”. A unique documentary survival from the eighteenth century suggests that controls were actually implemented quite systematically, at least in some periods. For the community of Wildberg, there survives a single booklet of “Polizei-Tax-Rechnungen” (regulatory fine accounts), which lists all the clothing fines levied over a 12-month period between February 1713 and February 1714.⁹⁹ Similar registers of clothing fines survive for other parts of Europe in the seventeenth and eighteenth centuries, suggesting that such systematic, local enforcement was not unique to Württemberg.¹⁰⁰

This register makes it possible to identify the targets of sumptuary regulation. As Table 8 shows, over this 12-month period, 110 individuals in a community of only about 1,300 inhabitants were fined for wearing 218 forbidden garments, most of them small items of

⁹⁶ PAE KKP, Vol. II, fol. 46r, 15.7.1708: “wegen ihres überaus großen halßtuches, welches sie über ihren Stand zutragen pflaget”; “wann der Pfarrer nichts wisse zu predig., als von halßtüchern, könne ers wol bleiben lassen”.

⁹⁷ PAW KKP, Vol. V, fol. 64v, 4.2.1687: “weilen dißer Zeyherin Sohn vnd Tochttern sich in Klaidern über gebihr sehen laßen vnd so her gehen dz sie wohl anderster Kommen: vnd Ihre alte Muetter erhalten Könten, Alß weißt man Ihro nit zue willfahren, sondern Ihre Kinder werden Crafft der Kindischen schuldigkeit anerjnnert Ihr Mueter zue verpfleg.”.

⁹⁸ PAE KKP, Vol. II, fol. 19r, 1.5.1703: “die haußarme Leutt”; “darneben etlichen Wittib. ernstl. Verweißung gethan, daß sie des loßen geschwäzes, Vnd andern schändlichen Vnwesens, so bißher bey v. Vnter ihnen, v. sonderlich in Liechtgärg Vorgelauff., auch Übermuths in Kleidern bemüssig. soll.”

⁹⁹ HSTAS A573 Bü. 6712, fol. 3r-6v, 1713-14.

¹⁰⁰ On Germany and Switzerland, see, for instance, Bulst (1993), 34-6; on France, see Moyer (1996), 244-336.

silk or calico. Although some fines were levied for men’s or children’s clothing, 91 per cent of those penalized were female. This finding is consistent with sumptuary regulation throughout early modern Europe, which was directed disproportionately at women.¹⁰¹ Married women took pride of place, at 61 per cent of all females fined, a finding also consistent with European studies indicating that sumptuary laws emanated partly from men’s desire for institutional support to rein in wives’ spending. As one legislator declared in 1621, “laws may rule them though their husbands cannot”¹⁰² – a motive discussed further in the next section. But even a few unmarried daughters, maidservants, female relatives, and independent women living in lodgings were willing to allocate some of their meagre earnings to small fashionable garments – and to incur social opprobrium and monetary costs for doing so.

Table 8:
Violations of Consumption Regulations, by Sex and Household Status,
Wildberg, February 1713 to February 1714

Sex and household status	Female			Male			Unknown sex			Total		
	no.	%	fine	no.	%	fine	no.	%	fine	no.	%	fine
Adult male	0	0	n/a	4	57	13.50	0	0	n/a	4	4	13.50
Widow	1	1	3.00	0	0	n/a	0	0	n/a	1	1	3.00
Wife	61	61	6.16	0	0	n/a	0	0	n/a	61	55	6.16
Offspring	18	18	6.17	3	43	3.00	3	100	4.00	24	22	5.50
Servant	7	7	6.43	0	0	n/a	0	0	n/a	7	6	6.43
Relative	6	6	4.50	0	0	n/a	0	0	n/a	6	5	4.50
Independent woman	7	7	5.57	0	0	n/a	0	0	n/a	7	6	5.57
Total	100	100	6.01	7	100	9.00	3	100	4.00	110	100	6.15

Source: HSAS A573 Bü. 6712 (Polizeiregister), 1709/17, fol. 3r-6v.
Note: Fine = mean fine imposed (in Kreuzer).

It might be argued that all these fines simply show that clothing regulations had no effect, as is sometimes claimed of sumptuary laws more generally. But fines, although they did not wholly prevent people from buying prohibited garments, increased their costs, as did public shaming, threats of confiscation, and denial of poor relief. This register, after all, records the consumption only of those who could afford to pay the fines on top of the cost of the garments. The typical fine inflicted in 1713 was non-trivial. Even for an adult male, the average clothing-fine was 13.5 *Kreuzer*, 1.7 days’ average earnings for a proto-industrial worsted-weaver, the most important single occupation locally.¹⁰³ For a woman, the average clothing-fine of 6 *Kreuzer* weighed more heavily – 2-5 days’ earnings for an independent spinner, more than 6 days’ wages for a maidservant.¹⁰⁴ A fine of this size did not make it impossible to indulge in new forms of consumption, but cannot fail to have deterred the marginal consumer,

¹⁰¹ Hunt (1996), 251-4.

¹⁰² Hunt (1996), 237 (quotation), 255-72.

¹⁰³ For average weavers’ earnings, see Troeltsch (1897), 221-5.

¹⁰⁴ Ogilvie (2003), 304.

especially among women and the less well-off. The resentment and conflict that sumptuary controls evoked provides additional evidence that even those who could afford to violate them perceived them as a real constraint.

A second major target of sumptuary controls was the public consumption of food and drink, at taverns, marketplaces, fairs, weddings, baptisms, funerals, and other non-domestic venues. “Alimentary regulations” were common in many parts of Europe, including Württemberg, well into the eighteenth century.¹⁰⁵ As with sartorial regulation, the social pressures for alimentary regulation were multifarious – maintaining social demarcations, reining in worldly display, controlling drunkenness, enforcing gender norms, and even preventing scarcity. Alimentary regulation, too, went far beyond normative exhortations: the legal provisions may have provided the rhetorical justification, but underlying social pressures motivated enforcement in everyday life.

Maintaining social demarcations was one major motivation. Alimentary regulations were enforced in practice against upwardly mobile members of the lower social orders who staged extravagant weddings, baptismal suppers, and funerals aping the consumption patterns – and thus challenging the valued social status – of higher strata. Community courts – both temporal and communal – prosecuted excessive consumption at baptismal suppers and weddings, measured by the quantity of food or the number of guests.¹⁰⁶ At least in some periods, this regulation was imposed quite systematically. Thus from 1713 to 1743, registers survive recording the graduated fines paid by townsmen and villagers in the district of Wildberg who violated the sumptuary ordinances by inviting “too many” guests to their wedding parties.¹⁰⁷

A second major motivation for alimentary regulation was the notion that excessive extra-familial consumption of comestibles led to scarcity. The 1644 sumptuary ordinance, for instance, claimed that excessive non-household consumption was not only untraditional and dishonourable, but “inflated the prices of victuals and other necessities”.¹⁰⁸ Men with families to support might buy food in the market, but as one Wildberg citizen complained at the 1660 community assembly, independent women (*Eigenbrötlerinnen*) should be ejected from the community because of their excessive market consumption: “in the market everything is grabbed away by them, and no citizen can get anything any more”.¹⁰⁹

That case illustrates a third key concern of the alimentary regulations – controlling female behaviour. Württemberg taverns traditionally functioned as social spaces for both sexes,

¹⁰⁵ Hunt (1996), 17-22, 33-40, 205, 251, 298-301, 359.

¹⁰⁶ On baptismal suppers see, for instance, PAE KKP Vol. I, fol. 63v, 8.9.1695; PAE KKP Vol. I, fol. 65r, 10.11.1695; PAE KKP Vol. I, fol. 66r, 21.12.1695.

¹⁰⁷ HSTAS A573 Bü. 6712-4 (Polizei-Tax-Register), 1713-1743.

¹⁰⁸ “Zweite Polizeiordnung” (28.10.1644), in Reyscher (1828ff), Vol. 13, 41-4, here 42: “so wohl die Victualien, als andere zu hüß vnd füß benötigte Waaren gestaigert werden”.

¹⁰⁹ HSTAS A573 Bü. 91, fol. 8r-v, 29.10.1660: “werde vff dem Marckht alles von Ihnen hinweg gerissen, könne kein burger nichts mehr bekommen”.

but from the later seventeenth century on, although groups of men consuming bread and wine in taverns were tolerated, groups of women who did the same began to be fined and incarcerated, even when the women claimed they were only seeking warmth.¹¹⁰ The controls were not limited to spinsters, but extended to married women and widows, even wives drinking alongside their husbands.¹¹¹ Regulation of female tavern-going was thus motivated not so much by anxiety about spinsters exposing themselves to licentious contacts as by deeper concerns about the social implications of *any* woman consuming independently, outside the domestic sphere.

This is vividly illustrated by the accusation levelled in 1684 by the Ebhausen church court against Barbara Müller who, “on Michel Lodholtz’s accounting-day, remained in the tavern past closing-time and spoke very impudently, saying that she could earn 3 *Batzen* in a quarter of an hour, so what did it matter if she consumed something? ... unlike this tankard, she didn’t have a lid”.¹¹² Barbara Müller evidently felt that a women who earned her own money was entitled to make her own consumption choices, including engaging in the individuated consumption of comestibles outside the household evoked in accounts of the English or Dutch Industrious Revolutions.¹¹³ But in Württemberg, it was precisely this combination of independent market work and independent market consumption by women that male householding elites found unacceptable and used communal and religious institutions to penalize. The village court sentenced Barbara Müller to three days and three nights in the house of discipline. Would such palpable penalties not have reduced incentives to work or consume, even for such impudent women as Barbara Müller?

Sumptuary regulation intensified in Württemberg between c. 1650 and c. 1750, alongside the administrative apparatus necessary for its implementation. Local courts monitored compliance, offenders were punished, and enforcement evoked resentment and conflict. This suggests that contemporaries regarded sumptuary controls as binding constraints. But how might we assess the broader, quantitative impact of such sumptuary regulation on the Consumer Revolution?

One promising avenue is to analyse the things people owned. Württemberg law mandated detailed marriage and post-mortem inventories, which survive for around four-

¹¹⁰ For examples, see PAE KKP, Vol. I, fol. 10v, 15.01.1682; PAE KKP, Vol. II, fol. 148r, 31.1.1716; and PAE KKP, Vol. VII, fol. 11v, 2.3.1785.

¹¹¹ For examples of married women and widows penalized for tavern-going, see PAW KKP, Vol. V, 4.12.1705, fol. 252r-v; PAE KKP, Vol. II, fol. 85r, 20.08.1711; PAE KKP, Vol. II, fol. 103r, 12.05.1713.

¹¹² PAE KKP, Vol. I, fol. 16r, 28.9.1684: “daß sie an Michel lodholtzen abrechnungs tag über Zeit im wirths hauß gebliben vnd damal. sich frecher weiß vernehmen laßen, sie Komm in einer Viertel stund 3 batz. verdienen, wann sie schon etwz verzehre”; *ibid.*, 7.11.1684: “sie hab auch kein deckhel, wie dz Kántlin”.

¹¹³ De Vries (2003), 63.

fifths of ordinary citizens who reached adulthood and married.¹¹⁴ These inventories include detailed, gender-specific lists of clothing and ornaments. Benschmidt's analysis of 150 Nürtingen inventories between 1660 and 1840 detected a significant decline in clothing ownership between 1660 and 1780, followed by a huge increase up to 1840, which she ascribes partly to "the abolition of all clothing ordinances after the French Revolution".¹¹⁵ Medick's study of 444 inventories for the Württemberg village of Laichingen between 1747 and 1820 describes the gradual spread of small items of sartorial luxury, but also widespread compliance with the clothing regulations until the last quarter of the eighteenth century. It was only after c. 1800, when the sumptuary regulations had been abolished, that the value of wives' clothing surpassed that of husbands, female dress began commonly to include bright colours, exotic fabrics, ornamental accessories and forbidden trinkets, and sartorial display spread beyond the village elite to day-labourers and proto-industrial weavers.¹¹⁶

These studies analyse only quite small samples of inventories and do not use multivariate statistical techniques, so they cannot establish whether changes in consumption followed changes in regulation, if different strata violated rules to differing degrees or followed a different chronology, what other personal or community characteristics influenced consumption, and whether the pattern was replicated more widely across Württemberg. A new research project on "Human Well-Being and the "Industrious Revolution": Consumption, Gender and Social Capital in a German Developing Economy, 1600-1900" will seek answers to these questions using a larger sample (c. 9,000 inventories), two communities (a town and a village), and a period of several centuries (1602-1899). By linking inventories to tax registers, censuses, and family reconstitutions, we will be able to analyse variations in consumption according to individual characteristics such as sex, age, fertility, household structure, occupation, taxable wealth, community citizenship, and communal office-holding, as well as exogenous variables such as sumptuary legislation and guild regulations.¹¹⁷

But even the scattered findings available so far show clearly that although people in early modern Württemberg may have been poorer and less highly informed than those in the Netherlands and England, they, too, sought to increase their market consumption after c. 1650.¹¹⁸ In doing so, however, they faced very different constraints. In Württemberg – as in many other early modern European economies – entrenched elites used their institutional

¹¹⁴ For a discussion of these sources, illustrating their potential to analyze consumption on the micro-level, see Ogilvie, Küpker and Maegraith (2009 forthcoming).

¹¹⁵ Benschmidt (1985), 34-6, 226-8, 230 (quotation).

¹¹⁶ Medick (1996), 384-7, 398-406, 414, 427.

¹¹⁷ This project is supported by the Economic and Social Research Council (RES-062-23-0759) between 2008 and 2012 (<http://131.111.165.101/faculty/ogilvie/ESRC-project-English.pdf>) and builds on a database developed for the project "Economy, Gender, and Social Capital in the German Demographic Transition", supported by the Leverhulme Trust (F/09 722/A) (see <http://www.hpss.geog.cam.ac.uk/research/projects/germandemography/>).

¹¹⁸ On this, see Benschmidt (1985), 65-8, 115-22, 226-30; Frey (1999), ch. 6; Medick (1996), ch. 5.

powers and “social capital” to impose sumptuary norms, limiting the extent to which women and the lower social strata could transform their production decisions into new consumption choices. These institutional constraints survived well into the eighteenth century, and may therefore have influenced the timing and intensity of any revolution in consumption – and any corresponding incentive to increase industriousness – before c. 1800.

4. Social Capital and Intra-Household Resource Allocation

The Industrious Revolution places particular emphasis on married women’s reallocation of labour time and consumer choices from household to market.¹¹⁹ But the exact processes behind this shift are not wholly clear. Household time allocation and consumption are affected by bargaining between family members. Existing analyses of the Industrious Revolution describe wives’ bargaining position as being primarily affected by their earning-power – i.e. by interactions between family and market.¹²⁰ But what if *other* institutions intervened in this bargain? We have already seen how institutions widespread in many early modern European societies – guilds, communities, religious bodies, political authorities – affected women’s position in the market. Such institutions could also affect women’s position in the *family*, altering the bargains between spouses over time-allocation, income-sharing, and consumption choices.

Württemberg provides an instructive example of an economy in which non-familial, non-market institutions influenced household decision-making. The willingness of communal, religious and political institutions to intervene inside households is illustrated by a database of 313 marital conflicts collected from the church court minutes of two small Württemberg communities between 1650 and 1800.¹²¹ Lacking figures for the three other jurisdictions that heard marriage conflicts in Württemberg (community, district, and consistorial courts), and lacking comparative figures for other European societies, we cannot say whether marital conflict in these Württemberg communities was especially high or low, but we can analyse its characteristics. As Table 9 shows, one notable characteristic was that more than two-thirds of marital conflicts were brought before the court not by spouses themselves, or by their families, but by third parties: neighbours, community office-holders, clergymen, or state officials. In Württemberg, spousal bargaining was a matter not just for the family but for the wider institutional framework.

A second notable characteristic is the importance of economic issues. Details survive of the causes of conflict in over four-fifths of cases. As Table 9 shows, the four main causes

¹¹⁹ McKendrick (1974), 197-200; Berg (1985), 169-72; De Vries (1992), esp. 118-9; De Vries (1994), 261; De Vries (2003), esp. 47; Noordegraaf / Van Zanden (1995).

¹²⁰ De Vries (2008), 214-24.

¹²¹ For detailed analysis of this database, see Ogilvie (2003), 179-94.

of spousal disputes were economic conflict, conflict with relatives, verbal abuse, and sexual difficulties. Of these, economic conflict was the most important, playing a role in half of all cases for which details are known, compared to only about one-third for conflict with relatives and verbal abuse respectively, and only about one-fifth for sexual difficulties. Economic conflicts were highly various – one-quarter of cases involved bad householding by the husband, one-quarter involved alcohol consumption, one-sixth involved food allocation, one-tenth involved land or property, one-tenth involved bad householding by the wife. But, as we shall see, disputes between spouses – and intervention by commune, church or state – were evoked by a wide range of other economic issues.

Table 9:
Characteristics of Marital Conflict Cases, Church Court Records,
Wildberg 1646-1800 and Ebhausen 1674-1800

Marital conflict cases	Town		Villages		Grand Total	
	no.	%	no.	%	no.	%
<i>Whole sample:</i>	212	100	101	100	313	100
Initiated by community, church, state, neighbour	151	71	62	61	215	69
Initiated by wife	27	13	17	17	44	14
Initiated by wife plus wife's family	6	3	4	4	10	3
Initiated by wife's family	17	8	5	5	22	7
Initiated by husband	10	5	12	12	22	7
Initiated by husband's family	1	0	0	0	1	0
Initiated by couple	0	0	1	1	1	0
<i>Sub-sample with conflict details:</i>	169	100	89	100	258	100
<i>Economic causes:</i>						
Any economic conflict	83	49	47	53	130	50
Husband bad householder	32	19	30	34	62	24
Wife bad householder	12	7	11	12	23	9
Property, inventory, marriage portion	14	8	11	12	25	10
Stealing within family	12	7	7	8	19	7
Food allocation or availability	20	12	24	27	44	17
Alcohol consumption	38	22	26	29	64	25
<i>Other major causes:</i>						
Conflict with relatives	64	38	30	34	94	36
Verbal abusiveness	51	30	35	39	86	33
Sexual difficulties or jealousy	37	22	20	22	57	22
<i>Physical violence:</i>						
By husband	73	43	43	48	116	45
By wife	13	8	7	8	20	8
By both spouses	11	7	5	6	16	6

Sources: PAW KKP Vols. I-VII (1646-1800); Pfarrarchiv Ebhausen, KKP Vols. I-VII (1674-1800).

One frequent flashpoint was a wife's time-allocation. As we saw in Table 3, married women in Württemberg were both able and willing to work outside the household. Only 41 per cent of married women's observed work was in household production, compared to 48 per cent in non-household work – 20 per cent in agriculture, 18 per cent in industry (crafts, proto-

industry, spinning, milling), and 10 per cent in tertiary activities (commerce, tavern-keeping, labouring).¹²² But the marital conflict database shows equally clearly that husbands thought that *they* should be in charge of deciding whether their wives worked.¹²³ To give just two examples, in 1685 a major issue in the conflict between the Wildberg tanner Hans Bernhardt Memminger and his wife Margaretha was that she had disobeyed him when he “forbade her to go out working any longer”.¹²⁴ Similarly, in 1769, the main complaint of the Wöllhausen weaver Johann Martin Dengler against his wife Agnes Margaretha was that she “did spinning for strangers even though she had her own [wool] to spin ... and always wants to work more than he does”.¹²⁵

When wives disobeyed such prohibitions, husbands regarded coercion as legitimate. As Table 9 shows, nearly half of all marital conflict cases involved physical violence by husbands. One issue that evoked such violence was a wife’s market work, especially when it interfered with a husband’s definition of appropriate standards of household production. In 1666, for instance, Young Hanß Peürlin in Effringen justified beating his wife on the grounds that “she goes out of the house far too much and does not attend to the housekeeping, through which he is sometimes caused to become impatient”.¹²⁶ In 1685, when Margaretha Memminger disobeyed her husband’s prohibition on her going out working any longer, “he beat her so that the blood ran down her front and back”.¹²⁷ In 1769 Johann Martin Dengler of Ebhausen threatened to beat his wife Agnes Margaretha for spinning for other weavers rather than himself.¹²⁸ In 1778, the Wöllhausen weaver Daniel Dengler justified death threats against his wife on the grounds that she “is herself to blame for this, since she does not remain at home, but runs around among the houses”. He also explicitly requested reinforcement by the communal church court, demanding that it “compel his wife, so that she remains at home”.¹²⁹ In such cases, the court typically threw its weight behind the husband, sometimes feebly admonishing him for violence but always ordering the wife to obey him and “attend loyally to the householding, as befits an honourable wife”.¹³⁰

¹²² For a detailed discussion, see Ogilvie (2003), 141-72; and Ogilvie (2008).

¹²³ For similar findings, see Roper (1989), 178-80.

¹²⁴ PAW KKP, Vol. V, fol. 28v, 24.1.1685: “hette Er Ihro verboten solte den Schaffen nimmer gehen”; “er sie geschlag. daß dz bluet hinden vnd vornen her ab gelauffen”.

¹²⁵ PAE KKP, Vol. V, p. 267, 19.4.1769: “daß sie frembden Leuten Wolle spinne, da sie doch ihre eigene zu spinnen habe ... und [ins.: immer] mehr schaffen wolle als er”.

¹²⁶ PAW KKP, Vol. III, 12.1.1666, p. 2: “Sie lauffe gar zuvihl auß dem hauß wartte der haußhaltung nicht ab, dardurch Er etwann Zuer vngeduldt vervsacht werde”.

¹²⁷ PAW KKP, Vol. V, fol. 28v, 24.1.1685: “hette Er Ihro verboten solte den Schaffen nimmer geben”.

¹²⁸ PAE KKP, Vol. V, p. 267, 19.4.1769.

¹²⁹ PAE KKP, Vol. VI, 6.2.1778, fol. 43r-v: “sein Weib sey selbst Schuld daran, denn sie bleib nicht zu Haus, lauf nur in den Häusern herum”; “er bitte aber, man soll sein Weib dazu anhalten, daß sie zu Haus bleibe”.

¹³⁰ PAW KKP, Vol. III, 2.4.1669, p. 256-7: “der haußhaltung, wie einem Ehrlichen weib Zuestehet, getrewlich vorstehen”.

Husbands consequently found that they could enforce their bargaining position in the household even more effectively by appealing to outside institutions manned by other married males, to whose fellow feeling they could explicitly appeal. In 1681, for instance, a Wildberg butcher who threatened his wife with a knife when she resisted his decisions about spousal time-allocation put it to the communal church court that, after all, “one can easily imagine that sometimes trouble arises between married people”.¹³¹ In 1771, the Ebhausen court had been receiving reports of the forest-warden’s wife-beating for years, but had no rejoinder to the man’s assertion that “he was the husband – after all, he had the right ... his wife was his own – he could treat her however he pleased”.¹³² The outcome was unsurprising. External institutions supported the husband’s control over a wife’s time, as in 1657 when the Wildberg court ordered that Friedrich Hosch’s 58-year-old wife should “in future not go out of the house without her husband’s permission, in exchange for which her husband shall allow her to work”.¹³³ In a society where external institutions intervened inside families to support husbands in spousal disputes, married women were less free to reallocate time from household to market production, and thus to fuel any Industrious Revolution.

Husbands also claimed control over wives’ and offspring’s market earnings. In 1661, for instance, the Wildberg weaver Young Johannes Rempffer was “taking away from his wife and children the food that they earn bitterly with spinning”.¹³⁴ Likewise, in 1793, the Ebhausen smith Hans Martin Hausen was demanding that his wife Barbara “give him half of her earnings, even though he earns little or nothing that he can give her”.¹³⁵ If the husband could be demonstrated to be prodigal, the communal court might expostulate feebly, but it also typically admonished the wife to yield. Thus in 1674, when the Wildberg butcher Hannß Geörg Steimblen threatened to kill his wife for not giving him 30 *Kreuzer* she had earned independently by selling ragout, the court fostered out their child for its own safety but ordered the wife to stay home with her husband, ineffectually warning both spouses “to treat each other better in future”.¹³⁶ Where a husband’s bargaining position was reinforced by institutional support, a wife lost disposition over any money she might earn, which inevitably altered her incentive to allocate time to market work.

¹³¹ PAW KKP, Vol. IV, fol. 199r-v, 22.4.1681: “könne mann ja leicht ermeßen, daß je mahlen eine ungelegenheit zwischen Eheleüthen geben”.

¹³² PAE KKP, Vol. V, p. 254, 4.7.1772: “er seye der Mann – er habe doch recht ... er habe ein Weib vor sich – er dörfe sie tractiren, wie er wolle”.

¹³³ PAW KKP, Vol. I, fol. 153r, 9.1.1657: “die fraw ins kunfftig ohne erlaubnuß deß mans nicht außer hauß gehen solle, hingegen der man Ihro Zueschaffen erlauben solle”.

¹³⁴ PAW KKP, Vol. II, fol. 43v, 25.10.1661: “weib vnd Kinder von Ihrer speiß [ins.: die] Sie mit spinnen Saur v.diennen weg nemme”.

¹³⁵ PAE KKP, Vol. VIII, p. 5, 31.5.1793: “fordere, daß sie ihm ihren halben Verdienst geben solle, u. er Verdien doch wenig oder nichts, das er ihr geben könne”.

¹³⁶ PAW KKP, Vol. III, p. 641-2, 12.6.1674: “ins Künfftig sich besser alß bishero beschehen, gegen [ins.: einander] Zue bezeügen”.

Husbands' control over household resource allocation also extended to consumption. In 1689 a Gültlingen husband "locked the bread away, and when [his wife] asked for money to buy bread from the shoemaker, he said she didn't need bread because he himself had already eaten".¹³⁷ In 1715 a weaver's wife in Wildberg complained that "in her last childbed [her husband] had not let anything good be cooked for her, [and] she had had to eat oat gruel".¹³⁸ In 1770, a weaver's wife from Wöllhausen ran away "because [her husband] gives her no money for bread, but rather makes use of it for other, less necessary things ... she had not really wanted to run away, but rather had only sought thereby to compel him to get some bread".¹³⁹ Husbands also decided how much the dwelling would be warmed, as in 1772 when a Wöllhausen weaver's wife "could not stay in their main room in the daytime because [her husband] heats it little or not at all".¹⁴⁰ The court might admonish a husband who demonstrably deprived his wife of basic sustenance, but would also typically instruct the wife "to show and conduct herself toward her husband peacefully and modestly ... and not give him cause to give her trouble".¹⁴¹

A husband's control over money earnings translated directly into control over even the most basic forms of *household* consumption such as meals and warmth. When it came to *market* consumption, his control over money earnings was even more decisive, especially when, as so often happened, it was reinforced by communal or religious intervention. In 1715, for instance, Young Hans Georg Hezel's wife in Wildberg lamented that "he does not let her have any shirts and clothes made, for which reason lice and vermin inevitably grow on her; her mother has to provide her clothes"; the community court merely ordered both spouses to behave better, and the wife to be cleaner.¹⁴² In 1767, the alcoholic and prodigal Wöllhausen weaver Johann Martin Dingler "refused to provide [his wife] with a necessary skirt", but when she sold two tablecloths to get the money to buy clothes, accused her of "being untrue to him in the domestic economy, with table and store-chest, and being a gadabout who never stayed home" – charges on which she was then closely interrogated by the community

¹³⁷ PAW KKP, Vol. V, fol. 87r-v, 23.5.1689: "er Ihro dz brodt ein beschloßen vnd alß sie gesagt solte Gelt hohlen beim Schuehmacher dz sie brod Kauffen Können, er Ihro zur antwort geben sie brauche Kein brodt er habe schon Geßen".

¹³⁸ PAW KKP, Vol. V, 1.3.1715, fol. 318r: "Er habe Ihro zu theürst in ferndig. kindbett nichts guts kochen laßen, Sie habe haber brey eßen müßen".

¹³⁹ PAE KKP, Vol. V, p. 205, 28.7.1770: "Weil er ihro Kein Geld zu brode gegeben, sondern solches zu andern weniger nöthigen dingen verbraucht ... sie habe nicht eigentlich verlauffen wollen, sondern ihn nur damit nöthigen wollen, daß er brod anschaffen solle".

¹⁴⁰ PAE KKP, Vol. V, p. 258, 12.10.1772: "bey tag könne sie nicht in ihrer Stuben seyn, weil er solche wenig oder gar nicht einheize".

¹⁴¹ PAW KKP, Vol. III, 2.4.1669, p. 256-7: "sich geg. Ihme Ihrem Mann auch fridlich vnd bescheid. erZaig. vnd v.halten: ... vnd Ihme Zuer vngelegenheit nicht vrsach geb. Solle".

¹⁴² PAW KKP, Vol. V, 1.3.1715, fol. 318r: "Er laße Ihro Keine Hembd. und Klaid. machen, dahero noth wendig c: v. lauß und ohngezifer an Ihro wachsen laßen müße, Ihre Mutter müße Sie Klaid. laßen".

court.¹⁴³ In a society in which communal and religious institutions supported husbands' control over consumption decisions, wives – whether or not they were allowed to work in the market – were less likely contribute to a Consumer Revolution by purchasing market fashions.

Occasionally a women secured some protection by bringing her husband to court, especially if she could portray his behaviour as burdening the wider community. The authorities sometimes penalized a blatantly prodigal husband even while they ordered the wife to submit in order to keep the marriage intact. But this should not lead us to conclude that communal, religious, or state institutions treated spouses impartially, let alone that they favoured wives, as has been argued by some scholars.¹⁴⁴ Communal and state authorities had their own priorities, high among them the desire to sustain marriages at almost any cost in order to ensure tax payments and prevent welfare burdens. Guild, community and state regulations that reduced women's earning capacity (discussed above in Section 1) created powerful incentives to keep married couples together to and support the husband as the major earner. Furthermore, communal and religious courts were manned by male householders who shared the perspective of accused husbands whom, as fellow citizens and guild members, they were reluctant to disoblige. This led courts to inflict an abusive husband with often risibly feeble penalties while ordering his wife “to give way to her husband in future”,¹⁴⁵ “to conduct herself toward her husband peacefully and modestly ... and not give him cause to give her trouble”,¹⁴⁶ “to greet him virtuously at all times, thereby protecting herself from misfortune”¹⁴⁷ – in short, to defer to his resource allocation decisions.

Institutional support for husbands in household bargaining, as studies of modern developing economies suggest, affects basic patterns of production and consumption, many of which were key variables in any Industrious Revolution. For one thing, depriving women of consumption reduces their productivity, reinforcing incentives to allocate them less consumption, thereby creating a self-sustaining cycle of reduced production and consumption by females.¹⁴⁸ Second, men's consumption choices may focus more on their own individual gratification (particularly with alcohol and tobacco), while women more often seek the well-being of the entire household, particularly the nutritional and health status of children.¹⁴⁹

¹⁴³ PAE KKP, Vol. V, p. 219, 30.1.1767: “Sie habe nicht weiter als zwey tisch tücher weggegeben, und ihr davor einen nöthigen Rock, den er ihr nicht habe anschaffen wollen”; “sie seye ihm im Haus-Weßen da und dorten [ins.: in tisch und Kasten] ungetreu geweßen; sie seye eine Ausläuferin, bleibe nie daheim”.

¹⁴⁴ Medick (1991), 55-6; Sabeian (1990), 124-46, 176-8.

¹⁴⁵ PAW KKP, Vol. V, fol. 315v, 4.1.1715.

¹⁴⁶ PAW KKP, Vol. III, fol. 256-7, 2.4.1669.

¹⁴⁷ PAE KKP, Vol. I, fol. 82v, 9.12.1697.

¹⁴⁸ Dasgupta (1993), 305-36, 401-511.

¹⁴⁹ For modern economies, see Dasgupta (1993), 471-2; for historical ones, see Ogilvie (2003), 193-4, 349-51.

Third, women may be more likely than men to allocate income to staples of the Consumer Revolution such as clothing, furnishings, or market comestibles.¹⁵⁰ Institutional support for husbands in household bargaining thus not only redistributed resources from women to men (thereby reducing women's welfare), but created incentives reducing women's market production and consumption (thereby reducing efficiency and growth in the wider economy).

Without analogous studies for different European societies, we cannot compare how women's bargaining position within households was affected by different institutional frameworks. The near invisibility of such institutional interventions inside households in studies of the Industrious Revolution in England or the Netherlands might be taken as *prima facie* evidence that they did not play the active role there that they did in Württemberg. Comparative studies of "social disciplining" certainly conclude that control of private life by community, church, or state was less effective in the early modern north Atlantic societies than in central, southern or Nordic Europe.¹⁵¹ Comparative studies also tend to confirm that early modern Dutch and English women enjoyed an unusually strong position in household and market.¹⁵² If future scholarship bears out these comparisons for the sphere of household bargaining, then the relative weakness of institutionalized social capital in England and the Netherlands, compared to societies such as Württemberg, may turn out to have been a crucial variable in enabling an early and vigorous Industrious Revolution.

5. Conclusion

This paper began with three open questions about the Consumer and Industrious Revolutions. Did they happen outside the North Atlantic economies? Were they shaped by the "social capital" of institutions other than family and market? And how were they affected by social constraints on women? Evidence from Württemberg, a non-Atlantic economy where non-familial, non-market institutions observably influenced both sexes' economic options, sheds light on these questions.

Economic agents – especially women – did seek to reallocate time from household to market in early modern Württemberg. But their ability and incentive to become more "industrious" was affected by institutions other than family and market. Communal institutions restricted women's market work where it threatened or annoyed entrenched interests. Guilds, communities and state authorities capped the wages and piece-rates that could be charged by spinners, servants, and other dependent workers, and enforced unusually low female-male wage ratios. Guilds excluded women – and male outsiders – from many of the industrial and

¹⁵⁰ De Vries, 47-8, 133-44.

¹⁵¹ See the literature surveyed in Ogilvie (2006).

¹⁵² Schmidt (2007); Van den Heuvel (2007); Van Nederveen Meerkerk (2006).

commercial occupations in which they were most productive and hence best able to earn. Church courts forbade work at religiously prohibited times and prevented women from minimizing costs via spinning-bees. Institutionalized “social capital” thus restricted the incentive and capacity – particularly of women and lower-status males – to allocate more time to market work, and thus to power an Industrious Revolution on the Dutch or English model.

Social capital also influenced the Consumer Revolution through commerce. Craft guilds in economies such as Württemberg restricted trade in industrial inputs and outputs to their own privileged, male members. Community and state regulations reserved trade in many primary products to their producers, penalizing middlemen as “regraters”. Retailers’ guilds reserved trade in most other wares to their own members and a few outside applicants who begged or purchased guild permits or state dispensations. The privileged few who monopolized the legal licenses mobilized corporate, communal and state institutions to prosecute “encroachers”. This was reflected in economic outcomes, with retail ratios in strongly guilded German territories much lower than those in the Netherlands and England where guilds were weaker and more flexible. Corporative social capital thus hindered the new commercial practices that brought new market wares within the knowledge and budgets of poorer social groups during the Dutch and English Consumer Revolutions.

A third effect of social capital was to facilitate sumptuary regulation. In many European economies between c. 1650 and c. 1750, courtiers, burghers, and members of the “notability” supported sumptuary regulations to demarcate their own social status. Male householders supported sumptuary controls to prevent female licentiousness and resist wives’ and daughters’ demand for new fashions. Guild masters lobbied for sumptuary regulations to protect their markets from exotic imports. Clergymen and church elders favoured sumptuary “discipline” to limit worldly adornment and lavish sociability. And the state supported sumptuary laws to make citizens spend less so they could pay more in taxes. Together, these social pressures created powerful local constituencies favouring sumptuary controls well into the eighteenth century. Perfect enforcement was not necessary. Local records show that the controls were enforced sufficiently to limit purchases of clothes and comestibles by marginal consumers, particularly women (the main targets) and the poor (who could not afford the penalties) – key groups of new consumers in the English and Dutch Consumer Revolutions.

Finally, the social capital of traditional institutions affected bargaining inside households. Where communal and religious institutions were strong, husbands mobilized them to shore up their control over wives’ time-allocation, earnings, and consumption choices. This inevitably reduced women’s ability to do market work, their incentive to do so, the income they earned, and their autonomy in spending it. The relative absence in the Netherlands and England of such institutional interventions in spousal bargaining may have facilitated an earlier and more vigorous reallocation of time and consumption by women, powering the Industrious Revolution.

These findings for Württemberg help answer our opening questions. Populations outside the North Atlantic economies did desire to work and consume in the market between 1650 and 1800, generating some symptoms of the Industrious Revolution. But the extent to which they could *implement* these desires was constrained by guilds, communities, religious bodies, political authorities, and many other institutions. Entrenched elites who perceived new work and consumption practices as threats used these institutions to generate a “social capital” of norms, information, sanctions and collective action to oppose them. Although they seldom succeeded in blocking new practices wholly, they often delayed them, limited them socially, or increased their costs. They deployed such social capital particularly strongly against less powerful groups such as women, migrants, and the poor – central agents in any Consumer or Industrious Revolution.

Cross-country comparisons suggest that such institutionalized social capital varied across early modern societies. It was widespread in many parts of central, Nordic, eastern and southern Europe but relatively weak in the societies of the north Atlantic seaboard which were the cradle of the Industrious Revolution. Even in England and the Netherlands, the institutional powers of privileged elites were not altogether moribund after 1650, which may explain why the Industrious Revolution was less visible in some regions and social contexts there.¹⁵³

This analysis suggests that we may reap large dividends by focussing on economies where growth and development came late. Perhaps these economies had their Industrious Revolution but it led to nothing in terms of economic development. This would cast doubt on the broader logic of the Industrious and Consumer Revolutions – the idea that reallocating time and consumption from household to market is a crucial element in economic growth. Alternatively, late-developing economies may not even have had an Industrious Revolution because it was stifled by institutional constraints. If so, then claims that social institutions are efficient or irrelevant to long-term economic growth must be wrong.¹⁵⁴ Studying why some economies developed late may thus be central to understanding why other economies developed at all.

¹⁵³ See Overton et al. (2004) on regional variations in England; see Van den Heuvel (2007) on social and regional variations in the Dutch Republic.

¹⁵⁴ For differing recent claims to this effect, see Clark (2007), 145-65; and Epstein (2008). For counter-arguments, see Ogilvie (2007a); Ogilvie (2007b); Ogilvie (2008a)

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