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Wealth inequality in pre-industrial Europe: What role did associational organizations have?

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Two sentence summary
This article, by surveying the literature, looks at the impact of associational organizations on patterns of wealth inequality in pre-industrial western Europe. It shows how they developed less regressive forms of taxation and redistribution, embedded the transfer and use of land and capital in coordination systems that curtailed accumulation, and sometimes even imposed maximums of wealth ownership, and it tentatively argues that their role had a downward effect on wealth inequality, even despite the exclusive character of these organizations.

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This article tentatively argues that associational organizations, by organizing taxation, curtailing accumulation, and imposing maximums on ownership, had a downward effect on wealth inequalities in pre-industrial western Europe, even despite their exclusive character.

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Abstract
A host of studies on wealth inequality in pre-industrial Europe has recently been published. Out of these, a narrative emerges of rising inequality in a context of emerging markets and growing state taxation, punctuated by calamities. By surveying the available material, this article highlights an element that is less systematically discussed in this literature: the role of associational organizations. They developed less regressive forms of taxation and redistribution, embedded the transfer and use of land and capital in coordination systems that curtailed accumulation, and sometimes even imposed maximums of wealth ownership. The article tentatively argues that the resulting downward effect on wealth inequality was found most conspicuously in societies where associations of middling groups of owners-producers held strong positions in economic and political life, even despite the exclusive character of their organizations. Such societies were gradually eroded in the early modern period, most notably as a result of the emergence of factor markets and state centralization, and the associated processes of proletarianization and scale enlargement. This did not happen without opposition and conflict, however, as the process was sometimes halted and showed distinct geographical patterns, which in turn influenced patterns of wealth inequality.

KEYWORDS
associations, commons, guilds, pre-industrial, taxation, wealth inequality

Much progress has recently been made in reconstructing material inequality in pre-industrial western Europe, most specifically for Italy, the Low Countries, and the Iberian Peninsula, with many case studies published over the last few years.[1] Alongside these detailed studies, some impressive syntheses, which offer broader interpretations of these data, have also appeared.[2] This article builds on these studies and acknowledges their importance, but at the same time it tries to complement them by highlighting a specific element: the role of associational and communal organizations. Notwithstanding a host of relevant studies published on these organizations in recent years, their role has hardly been discussed within the literature on pre-industrial wealth inequality. This study is a first attempt to fill the gap.

After a brief interpretation of current thinking about material inequality in the late medieval and early modern period and an equally brief discussion of the main methodological issues, provided in this introductory section, the paper will survey the literature for indications—preferably of a quantitative nature—of the effect of different forms of associational and communal organization on inequality and speculate about the wider implications for the present debates in the field.

In doing so, this article focuses on wealth inequality. This, rather than income inequality, is the best-investigated component of material inequality in late medieval and early modern Europe. For this period, incomes are more difficult to express in monetary terms, because only small segments of the population relied on wages, and total household incomes are seldom recorded in the relevant sources. These are mainly fiscal registers, a few of which are available from the first half of the fourteenth century and large numbers from the second half of that century on.[3] As wealth rather than income was taxed, and therefore registered, empirical studies on the pre-industrial period are mainly focused on wealth distribution. These studies, as well as the wider-ranging syntheses recently published, seem largely to agree on three complementary conclusions about wealth inequality in pre-industrial Europe: first, that wealth inequality in pre-industrial western Europe was rising as a result of economic growth, scale enlargement, market development, urbanization, and regressive state taxation; second, that wealth inequality reached high levels in the course of the early modern period; and third, that this rise in wealth inequality could only be stopped or temporarily reversed by calamities, most notably large-scale wars and pandemics.

Indeed, wealth inequality in early modern western Europe seems to have been high compared to earlier and later periods and compared to other parts of the globe. Making a comparison is not straightforward at all, however, because of source and measurement issues, and the different contexts from which the figures are obtained, but with this in mind we could use Gini coefficients and the top 1 per cent and top 10 per cent shares as yardsticks. The recent studies would then suggest that the typical range for wealth distribution in pre-industrial western Europe can be set

[1] See, for instance, the studies in the conference volume *Disuguaglianza economica nelle società preindustriali: cause ed effetti* (Prato, 2020), edited by G. Nigro, including van Bavel, 'Looking', on which this article builds further.

[2] As most notably: Alfani and di Tullio, *Lion's share*; Scheidel, *Great leveler*; Alfani, 'Economic inequality in preindustrial times'.

[3] For a discussion of sources for northern Italy, the area where most and earliest documentation is available, see Alfani, 'Economic inequality in northwestern Italy', pp. 1061–8; Alfani and di Tullio, *Lion's share*, pp. 47–56.

at a Gini of 0.6 to 0.9, mostly calculated for separate localities and regions,[4] with the higher figures reached in the course of the early modern period. Since the sources for this period often leave out the propertyless or landless, these figures may even underestimate real levels of inequality.[5] This is relevant when comparing these figures to those from periods for which fiscal sources do include propertyless households or persons (for example, modern ones) or those that are based on another type of source without this bias.

Another complicating factor, and one that is sometimes overlooked, in comparing figures between periods and between different parts of the globe, is the large extent of wealth owned by organizations in pre-industrial western Europe. The wealth of associational organizations, including guilds, fraternities, charitable foundations, commons, and village and town communities, generally accounted for several percent of total wealth. Religious organizations owned even more wealth, often much more, varying from a tenth to up to half of the total, as can be surmised from the share of landed property they held.[6] It is relevant to highlight this role of organizations in western Europe. To be sure, professional, religious, and charitable communities existed in many parts of Europe and Asia, but it was only in western Europe that they became formalized organizations with legal personhood as early as the pre-industrial period, which shielded their property from the direct grip of state elites and gave them a relative degree of independence to set their own rules and act in the political domain.[7] This difference even holds in comparison to the Middle Eastern *waqf*, which as a pious foundation enjoyed a large degree of protection from central government, but remained dependent on the descendants of the founder, as Islamic law did not recognize corporate personalities.[8] West European village and town communities, guilds, monasteries, and charitable foundations acquired legal personhood and a relatively high degree of independence in economic, organizational, and public matters from the twelfth century on, which sets them apart from those in the rest of the world, where they acquired these characteristics only slowly in the eighteenth century and more firmly in the nineteenth.

Their legal independence meant that the wealth of these organizations—forming a very substantial share of total wealth in pre-industrial western Europe—was separated from the direct control of the patrons, founders, or state elites. This property was not absolute and exclusive, but consisted of a bundle of property rights that were divided among various actors. The usage rights were largely distributed among the members of the guild or community, the canons or monks, or other beneficiaries, but they did not possess the right to sell this wealth. Similar situations of divided property rights were found more generally in pre-modern contexts.[9] In the numerous studies on social property distribution in pre-industrial western Europe published in the 1970s and 1980s, this type of property usually included, as it can be easily expressed as a percentage of total (landed) wealth.[10] However, because it is so difficult to attribute this wealth of organizations to

[4] Country-wide data are only available from the second half of the eighteenth century on, as discussed more extensively in section IV.

[5] For estimates of the upward effect of including the propertyless, see Alfani and di Tullio, *Lion's share*, pp. 102–4 and n. 11; Kumon, 'Deep roots', pp. 12, 20–5.

[6] For example, for the Cambrai region: Neveux, *Vie et déclin*, pp. 232–5, where around 1,600 religious organizations held 43% of all land in property.

[7] de Moor, 'Silent revolution', pp. 192–3, 196–7, 208–9; Huff, *Rise*, pp. 112, 121–2, 125–8, 134; Berman, *Law and revolution*, pp. 216–21, 239–41.

[8] Huff, *Rise*, pp. 135–6; Kuran, 'Middle East', pp. 77–82.

[9] See also sections III and V.

[10] For these studies, see also section IV.

individual owners, let alone include it in a Gini coefficient, it is seldom included in recent figures on wealth inequality, which are thus limited to private wealth held as exclusive property. Does this hamper comparisons between periods? One could argue that such comparisons are fair because they are restricted to private household wealth only, but for the interpretation of these comparisons it is crucial to know whether non-private wealth is negligible, as in many contemporary cases, or very extensive, as in many pre-industrial ones.

With these caveats in mind, we can look at estimates for other periods. For the pre-historical and proto-historical period, these can only be based on non-documentary, archaeological sources, which are not easy to interpret because of measurement issues.[11] They do suggest, however, that wealth inequality levels generally were lower, at Gini coefficients of around 0.4 to 0.6, or even much lower still for small-scale societies of hunter-gatherers, foragers, and horticulturalists.[12] Then there are, of course, figures for the twentieth century. Wealth inequality was low especially in the decades around the middle of the century, as a result of wartime destruction and redistributive policies in particular.[13] Recent research suggests that highly developed parts of the globe outside Europe in the pre-industrial period, too, had low levels of inequality. A recent paper on Japan for the period 1650–1870 finds Ginis of around 0.5, even when including the landless population, and it suggests that in China too wealth inequality was relatively low, with Ginis of 0.6 to 0.7.[14] Even though the *effects* of wealth inequality differed widely between cases, depending on the differential revenues flowing from this wealth and the levies to be paid from it, and on the possibilities of earning an income from labour, the first impression from these highly dispersed figures may indeed be that levels of wealth inequality *in themselves* in pre-industrial Europe were relatively high.

There are also many indications that levels of wealth inequality were rising over the period, from the fifteenth century onwards. These indications are found most notably in the studies on Italy and the Low Countries, and articulated most clearly by Alfani, who concludes that the development of wealth inequality from *c.* 1450 to 1800 across almost all of Europe is best typified as 'a monotonic rise'.[15] In recent studies, this rise is usually explained by referring to the conspicuous developments of the same period, including economic growth, the rise of markets, the development of state bureaucracies and their regressive fiscal systems, population growth, and urbanization.[16] All of these factors can be assumed to have pushed up wealth inequality. Moreover, it has been shown mathematically how in repeated interactions luck drives wealth inequality up to very high levels,[17] which is relevant for this period when market transactions and thus economic interaction substantially increased in frequency. All in all, the rise of wealth inequality is overexplained.

[11] Fochesato, Bogaard, and Bowles, 'Comparing ancient inequalities'.

[12] Fochesato and Bowles, 'Nordic exceptionalism?', esp. pp. 32–3. See also Scheidel, *Great leveler*, pp. 25–42.

[13] As reported by Piketty, most recently in *Capital and ideology*, pp. 415–85, and also stressed by Scheidel, *Great leveler*, pp. 130–41, both not reporting Ginis but top wealth shares.

[14] Kumon, 'Deep roots'.

[15] For instance, Alfani and Ryckbosch, 'Growing apart', p. 145; Alfani, 'Economic inequality in preindustrial times', pp. 10–12.

[16] As in the path-breaking paper by van Zanden, 'Tracing'. See also Alfani and Ryckbosch, 'Growing apart', pp. 148–52, nuancing the role of economic growth, and Alfani and di Tullio, *Lion's share*, pp. 132–55 and passim, emphasizing the role of the fiscal-military state and the related rise of regressive taxation.

[17] Scheffer, van Bavel, van de Leemput, and van Nes, 'Inequality'.

To stop wealth inequality from rising to extreme levels, countervailing forces are needed. These are now predominantly sought in external shocks and disasters, forming the third component of the dominant narrative. The role attributed to disasters holds an intuitive logic. War destroys capital goods and thus the wealthy are hit hardest. Epidemics kill people and increase the bargaining power of the remaining people vis-à-vis the rich. Both thus reduce inequality. This reasoning is also underpinned by empirical work, most clearly by Alfani, who shows a substantial drop in wealth inequality in Italy after the shock of the Black Death.[18] The levelling effect of disastrous shocks, and especially war, is also presented more generally, as in the synthesis by Scheidel.[19]

At times, it is suggested that these terrible, exogenous shocks and the broad economic and demographic developments of the period affected societies that were impotent to respond. This view is expressed in perhaps its most outspoken form by one of the eminent scholars of inequality, Milanovic, who states that inequality in pre-industrial economies is driven by accidental or exogenous events, because 'absent are the endogenous forces of economic development that we in the modern era assume to be the forces that affect inequality'.[20] Other scholars, however, have stressed the agency these pre-industrial societies had to shape patterns of inequality, most notably through the organization of states and their fiscal systems and the organization of emerging markets, including those for land, labour, and capital,[21] with the differences in institutional organization thus co-shaping differences in inequality outcomes between societies.

While these institutional approaches are valuable and worthwhile to pursue further, it is striking that they are largely focused on the two coordination systems we know best at present: the state and the market. This article is intended to complement these approaches by highlighting the role of bottom-up and associational organizations, as these played a major part in pre-industrial western Europe but are hardly discussed, let alone systematically considered, in the recent overviews of inequality patterns. Its goal is to see how these organizations enabled societies to respond, or not, to wealth inequality and to mould the effect of market and state forces and external shocks on inequality. To what extent did societies possess agency through these associational organizations and the rules they developed? By approaching from this specific angle, this study aims to contribute to a richer account of the mechanisms behind changes in wealth inequality in pre-industrial western Europe and thus to stimulate further research.

To this end, it surveys the relevant literature, most particularly the literature that enables us to assess the relationship between associational organizations and wealth inequality, and assembles information on this relationship, preferably of a quantitative nature. The geographical focus of the study will therefore be on those parts of western Europe where both wealth inequality and associational organizations are best investigated: Germany, northern Italy, and particularly the Low Countries (see figure 1). The resulting information, and a tentative interpretation of it, is structured according to the main ways in which associational organizations can be surmised to have impacted directly on wealth ownership and wealth inequality patterns, particularly among their own members. This is, first, by protecting their wealth, as most evidently in the face of shocks and disasters (section I). The second is by way of their role in repartitioning or levying taxes (section II) and imposing limits on wealth accumulation (section III). Lastly, the article will survey the literature to try and see how the effects played out for local or regional societies as a whole, including non-members (section IV). Section V concludes.

[18] Alfani, 'Inequality in preindustrial times'.

[19] Scheidel, *Great leveler*.

[20] Milanovic, *Global inequality*, p. 69.

[21] Most recently Alfani and di Tullio, *Lion's share*; van Bavel, *Invisible hand?*.

FIGURE 1 Map of western Europe, indicating the towns and regions mentioned in the text. © Iason Jongepier, GIStorical Antwerp (UAntwerpen/Hercules Foundation)

I

In order to get a first idea of the potential impact of associational organizations on wealth inequality, we start by surveying the literature on disasters. Not only have disasters been studied relatively often with regard to their effect on wealth inequality in recent years, but as a kind of test at the extreme margin they also help to bring out characteristics of societies which otherwise would have remained hidden. One of the main disasters, a man-made one, is war. Even though war in the short run could reduce inequalities because of its destruction of wealth, war in pre-industrial Europe in the medium and long run, apart from a few exceptions,[22] is generally argued to have favoured the growth of inequality, as a result of the high costs of recovery, favouring those with capital reserves, and the increases in regressive taxation to cover military expenses.[23] The role of

[22] As most notably the Thirty Years' War in Germany: Scheidel, *Great leveler*, pp. 201, 335–41; Alfani, Gierok, and Schaff, 'Economic inequality', p. 33.

[23] For the latter, see Alfani and di Tullio, *Lion's share*, pp. 178–9 and passim; Alfani, 'Economic inequality in preindustrial times', pp. 26–7. For the indirect effects of war (through taxation or conquest), see also sections II and IV.

associational organizations in shaping the effects of war on wealth inequality is not often explicitly discussed. The main exception is a case study on the Geradadda, a part of Lombardy.[24] This area, where communities possessed extensive commons and communal assets and had strongly organized associations, including confraternities, became heavily disputed between Milan and Venice in the opening decades of the sixteenth century. The area suffered from both the presence of soldiers and heavy war taxation. Nevertheless, the sale of the economic resources of the community to external investors was avoided and, as di Tullio suggests, wealth inequality was contained, or in some cases perhaps even reduced,[25] thanks to the buffers offered by communal assets and the credit-related opportunities provided by the confraternities, and the cooperation of local village elites who were keen to preserve the status quo within their communities. The latter points to the importance of the wider, societal context surrounding the functioning of these organizations.

This aspect is brought out even more clearly in the literature on the role of associational organizations in dealing with the risk of floods, most conspicuously for the areas on the eastern shores of the North Sea. The role of these organizations was prominent, since water management from the high middle ages became mainly organized there along associational lines, rather than by centralized states. The interaction between these associational organizations for water management, floods, and wealth inequality has been extensively discussed especially for coastal Flanders. These studies, particularly by Soens, show how landownership between the fourteenth and sixteenth centuries became concentrated in the hands of a small group, often bourgeois investors living outside the area, and how as a result active participation in decision making in water management matters by the whole community of landowners was replaced by the overriding influence of these owners of large landholdings.[26] The latter, who were not physically threatened by floods themselves, opted to cut back expenses and investments in water management, leading to an increasing incidence of floods.[27] These, in turn, forced small-scale owners without cash reserves to abandon their lands and enabled investors to step in and further enlarge their properties, giving rise to even greater inequality. This research thus highlights the relevance of the degree of participation in decision making within these organizations in order to understand inequality outcomes.

In the case of coastal Flanders, in the associational context, a feedback loop developed between disasters and wealth inequality, which pushed each other up. In other situations, however, associational organizations were able to break this loop and limit both the rise of disaster and the rise of wealth inequality. Perhaps the clearest examples come again from the southern parts of the Low Countries, more specifically its sandy, inland regions, including the Campine. Village communities, as well as associational organizations for the exploitation and management of the commons, were well-established there; they had become formally institutionalized in the fourteenth century and were characterized by a high degree of inclusivity.[28]

As shown by de Keyzer, these organizations, which gave access to common resources and a say in their use to nearly all households living in the village, including cottagers, proved very successful in both combating the risk of sand drifts and depletion of resources and limiting wealth

[24] di Tullio, 'Cooperating'.

[25] As suggested, for instance, for the community of Caravaggio, even though for the postwar period full data are not available; ibid., p. 92.

[26] Soens, 'Explaining deficiencies'.

[27] Ibid., pp. 45–7, 53.

[28] de Keyzer, *Inclusive commons*, pp. 34–44, 97–9; van Onacker, *Village elites*, pp. 80–100. For differences in inclusivity, see section III.

inequality.[29] This success crucially depended on the political leverage of villagers in local communities, the relatively well-functioning systems for conflict resolution, and princely support for their ability to impose and enforce strict rules for management.[30] Comparison to regions with similar geographical features and communal forms of agriculture, but different fates in terms of ecological sustainability and equity, such as the English Breckland, suggests that this political leverage of village communities, and the fact that no single interest group was able to dominate decision making, including village elites and lords who were also tied into this system, were crucial factors in their success.[31] This shows the importance of the wider societal and political context in which these associational organizations functioned and the extent to which their members were able to influence this context.

It may be surmised, but much more speculatively, that differences in associational organizations also played a role in the varied long-run effects of the Black Death. This would be a role alongside, or in interaction with, factors that are better investigated in relation to the effects of this massive pandemic on wealth inequality, including labour market dynamics and inheritance systems. The Black Death is often acclaimed as 'a great leveler', as it would have increased the bargaining power of the ordinary people who survived.[32] Levelling can indeed be observed in several parts of western Europe. For Italy in particular, Alfani and others have shown a reduction in wealth inequality, which lasted for about a century, while a decline is also suggested, but not demonstrated, for the eastern, coastal parts of the Iberian Peninsula.[33] For north-western Europe, too, the pandemic is generally argued to have brought more freedom and equality, but without concrete data on wealth distribution, as no reliable pre-plague data exist there. Arguably the best information is available for Germany, where figures for several, mainly western towns show a decline in wealth inequality in the second half of the fourteenth century.[34]

Other areas, however, displayed growing inequalities in the period after the Black Death, as in the southern Castilian border lands.[35] For eastern Europe, as Scheidel readily concedes, the picture is even more negative, with freedom and equality being diminished in the centuries after the Black Death.[36] Even though recently more regional diversity has been brought into the picture, and some east European regions are shown to have undergone these developments only much later or to a lesser extent, as in Bohemia,[37] the contrast between eastern and western Europe in the long aftermath of the Black Death remains.

Even though direct evidence for this early period is scarce, it can be speculated that the leverage of associational organizations, and the influence they had on political decision making at the local

[29] de Keyzer, '"All we are"'. For inclusivity, see de Keyzer, *Inclusive commons*, pp. 44–53. See section III for the caps on wealth and section IV for quantitative evidence on wealth distribution in the Campine.

[30] In contrast to the late medieval commons in the north-eastern Low Countries: van Zanden, 'Paradox', pp. 133–4.

[31] de Keyzer, '"All we are"', pp. 22–4; van Onacker, *Village elites*, pp. 177–82, 220–34 and passim. For commons having different arrangements and effects on wealth inequality, see section III.

[32] Scheidel, *Great leveler*, pp. 293–313; Alfani, 'Economic inequality in northwestern Italy', pp. 1077–9; both with caution and nuances.

[33] For the latter, see Furió, Viciano, Almenar Fernández, Ruiz Domingo, and Chismol, 'Measuring', p. 185.

[34] Alfani, Gierok, and Schaff, 'Economic inequality', pp. 14–21. Decline was negligible in Quedlinburg and absent in Rostock, the only towns in the east of Germany for which information is available.

[35] Oto-Peralías and Romero-Ávila, 'Historical frontiers', pp. 60–1.

[36] As already signalled in the work published around 1970 by Evsey Domar, who in turn was inspired by the much older work by the Russian historian Vassilii Kliuchevsky.

[37] Cerman, Maur, and Zeitlhofer, 'Witschaft', pp. 263–7.

level, played a role in these differences. It may be relevant that indications for levelling effects are from Italy, the Low Countries, and western Germany; that is, exactly for areas where in the period before the Black Death associational organizations were founded in their tens of thousands and often succeeded in acquiring political leverage, as the craft guilds had done in many towns in the Low Countries from the late thirteenth century onwards, breaking the power of small, closed urban patriciates.[38] The same connection is suggested by an exceptional case among the German towns where a decline in inequality in the second half of the fourteenth century did not take place: Rostock. The absence of an inequality decline there may perhaps be linked to economic and demographic factors,[39] but could also be related to the fact that a small patriciate retained its dominance there and the craft guilds were unable to break this in the fourteenth century. This is one case, but perhaps part of a more general pattern. It is at least striking that parts of Europe where the long period after the Black Death saw rising inequalities, including southern Castile and many east European areas, were those that had not seen this potent wave of association, let alone the resulting organizations getting access to government, as occurred in areas where inequality reduction actually can be observed.

Among the latter areas, Italy is different to the extent that associational organizations rose early there, and also lost some of their political leverage earlier too. Tentatively, this may be surmised to have played a role in the contrast that is observed for Italy between the equalizing effect of the Black Death on wealth inequality and the effect of the 1630 plague. In terms of mortality, the latter in many regions equalled or even exceeded that of 1348, but it did not have an inequality-reducing effect at all.[40] A major component in this difference is the changes in inheritance rules.[41] In the period of the Black Death, systems of partible inheritance were in force and these facilitated the levelling effect of massive mortality, but in the early modern period various institutional devices, including the *fideicommissa*, entails, and other restrictions on alienation, were used to keep properties undivided. At the time of the 1630 plague, more than half of the land was bound by entails or in mortmain, which blocked the dispersal of landownership.[42] This difference was related to a broader, more fundamental change which had taken place in Italy in the intermediate centuries. Urban elites had seized the opportunities offered by emerging factor markets and amassed enormous wealth, which they next also used to acquire political leverage, in the fifteenth century in particular, at the expense of the leverage of craft guilds and rural communities.[43] They used their influence to develop the rules that protected their material wealth and in 1630, when the pandemic struck, precluded a redistributive effect; instead the rise in inequality continued.

While the latter discussion of their role in the effects of large-scale pandemics remains more speculative, the case studies of local societies that were confronted with disasters suggest more clearly that associational organizations in many parts of Europe played a substantial role in mediating the effect of exogenous shocks on wealth inequality. In the cases investigated, this was often an equalizing or dampening role, but not always, depending on the organization of decision making within these organizations and the wider societal and political context in which these organizations functioned. Later in the article, these elements will be explored further.

[38] van Bavel, *Manors and markets*, pp. 119–22.

[39] As suggested by Alfani et al., ‘Economic inequality’, pp. 15–16, 20.

[40] As also noted by Scheidel, *Great leveler*, pp. 306–9, and Alfani, ‘Economic inequality in northwestern Italy’, p. 1080.

[41] Alfani, ‘Economic inequality in northwestern Italy’, pp. 1077–80.

[42] Cooper, ‘Patterns’, pp. 277–88. See also Alfani, ‘Economic inequality in northwestern Italy’, pp. 1077–80.

[43] van Bavel, *Invisible hand?*, pp. 111–42.

II

We now move the survey from the indirect to the more direct ways in which these organizations could shape patterns of wealth inequality. The notion that societies in pre-industrial Europe were unable to take direct measures to counter or limit wealth inequality, a notion that seems to be reflected in Milanovic's words quoted earlier, may stem from the fact that the measure most familiar to us—central state taxation—was not employed in this way. In contrast to present-day societies, with progressive tax rates and redistributive welfare systems funded by tax revenues, the effects of state taxation on inequality in the pre-industrial period were mostly regressive. The taxes levied by central states—in the late middle ages levied at extraordinary events and from the sixteenth century onwards through more continuous and regular tax regimes—were mainly used for war efforts, expenditures of the court, and the upkeep of the bureaucratic apparatus, rather than the provision of services or welfare for the population.[44] Even at the end of the eighteenth century, expenses incurred by central states for poor relief, healthcare, or education were almost negligible.[45] Moreover, taxes mostly consisted of excises or indirect taxes on consumption goods, thus mainly burdening ordinary people, while wealth taxes were levied only intermittently, or had flat or fixed rates, and were mostly modest in size. It seems safe to conclude that state fiscality had regressive effects and rather widened wealth disparities.[46]

Within this context, associational organizations could still exert influence on the organization and distribution of taxes, often in less visible ways. This was by influencing the choices made by central states in matters of fiscality, by organizing and partitioning state taxation on the ground, and by levying taxes for their own expenses.

The first of these three forms of influence was not always very conspicuous but not absent either, as suggested by developments in the Low Countries, where perhaps the furthest steps towards a less regressive fiscal system at the central level were made. In 1543, the Habsburg regime introduced a proportional tax on the revenues derived from wealth ownership, and in 1568 it tried to introduce taxes on exports and on commercial and industrial capital, and to make the tax on real estate proportional.[47] In the northern Low Countries, these moves in a less regressive direction were initially halted by the Dutch Revolt. Even though in 1598–9 taxes on the sale of property and succession were introduced, the rates were flat and the returns limited, with up to two-thirds of taxes in the new Dutch Republic consisting of excises, with regressive effects.[48] From the mid-seventeenth century, however, taxation became based on a more equal footing, through increasing taxes on real estate, bonds, and luxury products, resulting in a rise of the share of progressive taxes in total revenues from *c*. 30 to *c*. 60 per cent around 1700.[49]

This exceptional development away from regressivity may in part have been a response to the wave of tax riots in the second quarter of the seventeenth century, but it is also argued to have resulted from high tax morale among Dutch citizens, linked to the broad possibilities for taxpayers to participate in decision making about expenditures, often by way of the town governments—a

[44] Körner, 'Expenditure', pp. 402–14.

[45] Lindert, *Growing public*, pp. 7–11, 40–7; van Bavel and Rijpma, 'Formalized charity', pp. 160, 165–6, 182–3.

[46] Alfani and di Tullio, *Lion's share*, pp. 174–80, even elevate state taxation to being perhaps the main factor in the rise of wealth inequality.

[47] 't Hart, *Making*, pp. 75, 123–8.

[48] Ibid., pp. 123–31, 137–9.

[49] Fritschy, 't Hart, and Horlings, 'Long-term trends', esp. pp. 56–60 (leaving indeterminate taxes out of the calculation); Fritschy, *Public finance*, pp. 173–89; van Zanden and Prak, 'Towards an economic interpretation', pp. 132–3.

characteristic of the Dutch Republic.[50] As these town governments and civic virtues were to a large extent structured along associational lines there, this may be taken as an indication of a positive role of associations. However, the fact that the regressive system of the late sixteenth century was developed in the same setting, and that it was precisely a centralized state regime, the Habsburg regime, that had attempted to make the tax system there less regressive, warns us against taking too rosy a view.

Revolutionary regimes that directly and explicitly targeted inequality through redistributive measures were very few and only short-lived. One notable case was the regime of the Anabaptists, who ruled the Westphalian town of Münster in 1533–5. They introduced common ownership of wealth, abolished private property, and confiscated personal valuables and money.[51] This happened within an associational context. The two main political bodies in Münster at the time, which were seen as legitimized by communal will, were the council of the town community, which was elected by the citizens, and the United Guild, which was composed of the guild leaders and played a major role in the shift to Anabaptist rule.[52] Its measures must have reduced wealth inequality substantially, but after two years the Anabaptists were overthrown and their inequality-reducing policies abolished. The same happened somewhat later in Antwerp, under the Calvinist regime in the period 1577–85, where the Broad Council, stimulated by the deans of the craft guilds, developed a new, progressive fiscal policy that especially targeted the very wealthy.[53] The fall of this regime, and the re-installation of the rule of a small elite group, saw an immediate turn to regressive, indirect taxation.

Much more often, revolts and revolutions in pre-industrial Europe, and especially those of a non-associational nature, had only a marginal impact on wealth inequality, or none at all, especially when they did not entail more than a change of the individuals at the top. The limited effect on wealth inequality even holds for the most celebrated and successful revolution of the pre-industrial period, the French Revolution, which was explicitly anti-associational in character and resulted in the abolition of the guilds and the further erosion of the position of the commons.[54] Even though burghers came to the fore at the expense of the nobility and clergy, there was no fundamental change in wealth inequality. Private wealth inequality decreased only slightly between *c.* 1780 and 1810, and in the post-1815 decades even returned to very high levels.[55] Rather, as observed by Piketty, the French Revolution opened the way for an extremely inegalitarian society.[56] It is mostly in associational contexts, it seems, that revolts or revolutions in pre-industrial Europe had a more lasting effect on wealth inequality. In Münster, this had happened in a spectacular but short-lived way, but much more important was the slow but massive process of associational organization in the late middle ages, which consisted of a multitude of little revolts and brought about fundamental and more lasting changes.

More specifically, this happened when middling groups in society succeeded in acquiring a degree of autonomy for their organizations and associations. In several parts of western

[50] Fritschy, *Public finance*, pp. 176–81. For the second explanation: van Zanden and Prak, 'Towards an economic interpretation', nuanced by Fritschy, *Public finance*, pp. 187–90.

[51] Stayer, *Anabaptist community*, pp. 96–106, 118–21 and esp. 132–8.

[52] Ibid., pp. 125–8.

[53] Marnef, 'Experiment'.

[54] See also de Munck, 'Equality', pp. 117–18.

[55] Scheidel, *Great leveler*, pp. 232–8, stresses the levelling in the 1790s, but nuances its scale, while the empirical analysis by Piketty, *Capital and ideology*, pp. 126–30, qualifies the effect even more seriously.

[56] Piketty, *Capital and ideology*, p. 99.

Europe—including the north of Italy, the east of the Iberian Peninsula, the German-speaking lands, and the Low Countries—this was the case in the twelfth to fourteenth centuries, as a result of a lengthy process of self-organization. This process included strikes and revolts, but also more peaceful forms of collective action, as well as the development of associational organizations formed particularly by peasants, traders, and craftsmen, which gradually acquired political leverage.[57] This also enabled these organizations and their members to assume more concrete direct roles in taxation. The first was by organizing the partitioning of central state taxes at the local level. This could lead to a more equitable distribution.[58] In Catalonian localities where local councils registered wealth themselves and used this registration to set fiscal levies, for instance, taxes were set in proportion to wealth.[59] Only in the eighteenth century was this practice replaced by centralized systems with a more regressive character. In the Campine area, which was dominated by middling peasants and their associational organizations, the distribution of the fiscal burden even tended towards the slightly progressive. Figures from the fifteenth and sixteenth centuries show that all households contributed to taxes, but the richest households paid a proportional share or one even higher than that.[60]

Second, these associational organizations often could decide themselves on how to finance their own tasks, which were sometimes of a semi-public nature. Usually, their choices in the repartitioning of levies and the destination of expenses were more equitable than those made by the central states. The taxes levied by the associational organizations for water management, for instance, which in coastal areas of north-western Europe could amount to several percent of output or GDP, were mostly based on landownership, and proportional to it, and therefore did not press on the poor and landless. This was even the case on the Flemish coast, where the water boards had become skewed towards the interests of owners of large holdings, as we have seen.[61] Inequitable effects could still occur, such as after an inundation when additional taxes quickly had to be paid in cash—which hit the lower middle classes hard, while large landowners could easily bear such costs[62]—but this type of taxation in itself was equitable.

The same can be said of charitable organizations. Social spending by associational organizations, including foundations, charitable funds, almshouses, hospitals, and fraternities, in this period amounted to some 1 to 3 per cent of GDP, as calculated for the Netherlands, England, and northern Italy.[63] This was spent on members of the lower and middling groups who were in need. The redistributive effect of this, however, differed from case to case. In the Low Countries, the lion's share of contributions was generally made by the middling groups themselves, who formed the bulk of their members, not by wealthy elites.[64] An in-depth analysis using a database including all known welfare arrangements of Dutch craft guilds over the period 1550–1800, for

[57] de Moor, 'Silent revolution'. For Italy, see Jones, *Italian city-state*, pp. 130–51.

[58] Even though this fiscal role of these organizations could go along with the acquisition of privileges from government, as stressed for the guilds by Ogilvie, *European guilds*, pp. 48–60.

[59] García Montero, 'Wealth inequality'. This apart from the feudal property of nobles which was exempt anyway: ibid., p. 120.

[60] van Onacker, *Village elites*, pp. 68–77.

[61] Soens, 'Explaining deficiencies', pp. 37–8. See also section I.

[62] For coastal Flanders, see Soens, 'Explaining deficiencies', esp. pp. 48–52.

[63] van Bavel and Rijpma, 'Formalized charity'.

[64] See, for instance, Tits-Dieuaide, 'Les tables'; van Leeuwen, 'Guilds and middle-class welfare'. Prak, *Citizens*, pp. 111–12, 116–18, puts somewhat more emphasis on contributions by elites but still notes, on pp. 130–7, that most contributions were made by ordinary citizens and members themselves.

instance, shows that welfare was mostly financed from regular contributions by the members, supplemented by taxes on capital goods and revenues from its endowments, not dissimilar to a mutual insurance scheme.[65] The redistributive effect was therefore limited, and it was found in income, not wealth, but at minimum it did not enlarge inequalities.

This brief survey thus suggests that while taxation, and most particularly central state taxation, in pre-industrial western Europe was generally regressive, taxes tended more to proportionality in those societies where bottom-up organizations and associations played a prominent role locally, either in repartitioning central levies or in levying taxes themselves to fund their own activities.

III

While the preceding section discussed potential redistribution, this section surveys an even more direct avenue along which wealth inequality may be contained by associations: the imposition of measures against the accumulation of wealth, including caps on wealth ownership. Such measures are not imposed by the market as a coordination system, and only rarely by the state, but they are found with other systems, most notably the association and the community. Associational organizations had sprung up all over western Europe in the twelfth to fourteenth centuries, as we saw earlier, and the rules these developed and upheld, mainly at the local level, often entailed the imposition of caps on wealth accumulation. After their heyday in the late middle ages, in which they often acquired political leverage at the local level, these organizations gradually declined in importance during the early modern period, and with them their rules, as can be seen most conspicuously with the rural associations, albeit in a very uneven process with sharp regional differences.

The measures employed by associational organizations to curb wealth inequalities sometimes combined with those upheld by the family.[66] This was particularly the case where the latter employed the rule of partible inheritance, as in parts of Germany, often within a context where associations played a major role. A concrete, well-investigated case is eighteenth-century Neckarhausen, in Württemberg, where villagers were even 'obsessive' in according equal shares to all children.[67] All households there owned at least some land and they all had access to the common land and gardens, while large landholdings were almost absent. For such settings where kinship, associations, and/or manorial organization were important, it is not easy to make precise calculations of wealth inequality, however, because of the divided nature of property rights.[68] How can we decide who is the owner of a villeinage holding, where the villein household, the manorial lord, kin and relatives, the neighbours, and the village community all held parts of or claims to the bundle of property rights?

In Neckarhausen and similar German villages, this situation of equity changed only in the second half of the eighteenth century, when pauperization increased, in part caused by growing state taxation.[69] Elsewhere in western Europe this process of proletarianization was even more substantial and proceeded much earlier and quicker, as early as the late middle ages, and was

[65] van Leeuwen, 'Guilds and middle-class welfare', pp. 76–9, 82–3.

[66] For the latter, see also van Bavel, 'Looking', pp. 451–2.

[67] Sabean, *Property, production, and family*, pp. 13–16. For the following: pp. 39–40, 48.

[68] For a further analysis of figures, see section IV. For the issue of divided property rights, see introduction and section V.

[69] Sabean, *Property, production, and family*.

often associated with the rise of markets for land, lease, and labour, as will be further discussed in section V. As a result, the grip of the family on the land, which was the major component of wealth, and the impact of its rules, also declined. Rural areas where associational organizations were influential and also possessed political leverage, as in the Campine and Drenthe, to mention some cases discussed earlier, saw this process of proletarianization happen much slower and later, exactly because these associations were aimed at safeguarding access to property for their members, who were mainly middling peasant-owners.

Both in town and countryside, the associational organizations that operated at the local level, including the craft guilds and the commons, also took direct measures to prevent accumulation of wealth. They were able to uphold these by way of their political leverage and influence on local government, and sometimes even on regional or central government, as can be seen, for instance, in late medieval Flanders and Brabant and in the early modern Dutch Republic.[70] In this respect, western European associations stood out, because of the legal independence and freedom from central elite tutelage that their organizations had acquired, in contrast to other parts of the globe, and which they defended in the political arena through lengthy and often successful struggles against the dominant elites in the twelfth to fourteenth centuries.[71] Membership of associational organizations was not universal, as women, foreigners, and the poor were generally excluded, but it still typically comprised a fifth to half of the heads of households, mainly self-owning producers.[72] The successful struggles by associations thus offered access to decision making to a much higher degree than the most feasible alternative at that time; that is, top-down rule controlled by feudal or state elites.

In the late middle ages, these associational organizations developed comprehensive sets of rules, which often reduced or at least contained wealth inequality. These were inspired by entrenched ideas about equality fostered within these associations; not as a universal right for society as a whole, but for their membership, but still through their leverage at the local level sometimes impacting on local societies as a whole.[73] The associational organizations exerted this inequality-dampening effect to some extent by way of taxation—as discussed earlier—but mainly through restricting the transfer and accumulation of land and capital goods, putting upper limits on ownership or output and periodically redistributing usage rights. Guild regulations set caps on the ownership of equipment per craftsman and the number of apprentices and journeymen each master could employ.[74] These caps were found in the textile, brewing, and ironworking sectors, but also in the fishing sector. In late medieval Flanders, coastal communities with their associations of shareholders in fishing enterprises, for instance, had legislation to restrict the number of crew members per vessel, in order to avoid concentration or monopolization.[75] In the course of the sixteenth and seventeenth centuries, however, fishing in the North Sea became dominated by fishermen-entrepreneurs from Holland, and saw a process of scale enlargement, the

[70] Prak, *Citizens*, pp. 183–204.

[71] de Moor, 'Silent revolution', pp. 191–3, 196–7, 208–9. See also de Munck, 'Equality', p. 106.

[72] Exclusion is stressed particularly by Ogilvie, *European guilds*, pp. 93–132 and passim, while the relatively broad access to decision making is rather stressed by Jones, *Italian city-state*, pp. 130–51, 335–46, who highlights the broadening effect vis-à-vis elites, and Prak, *Citizens*, pp. 3–5, 63–71, 91–2, and passim.

[73] de Munck, 'Equality', pp. 105, 109–11, 114–15. See also van der Meulen, 'Get rich', pp. 47–51. For the possible impact on societies as whole, see section IV.

[74] Ogilvie, *European guilds*, pp. 184–8. For the Flemish cloth industry, see van der Meulen, 'Get rich', pp. 52–3.

[75] Lambrecht and Ryckbosch, 'Economic inequality', pp. 218–19.

growing use of wage labour, and the concentration of ownership in the hands of wealthy merchant-entrepreneurs.[76]

In the countryside, village communities and organizations for the management of the commons set upper limits for the use of common land and natural resources. In the Campine area, where much of the land was used in common, grazing was strictly regulated, use of the hay meadows was maximized, equal shares of sod to be collected per household were stipulated, and commercial sale of peat, sods, and wood was often restricted or even prohibited.[77] In Drenthe, in the north-eastern parts of the Dutch Republic, peasants clung tenaciously to this organization and the associated by-laws, including the prohibition of selling shares to non-residents.[78] While other parts of western Europe had seen the marginalization of the commons and their rules in the early modern period, peasants in Drenthe were rather successful in defending them, up to the early nineteenth century, when the central government started to target them and break them up.

These regulations, enacted within associative settings, were aimed at limiting accumulation and containing wealth inequality, but this does not mean we can automatically attribute an equalizing effect to the associations and their rules. Especially in the early modern period, and perhaps increasingly so, the guilds and the commons did also exclude people, privileging their members, who mostly belonged to the middling groups in society.[79] They could also become dominated by a small group of master craftsmen or *coqs de village*, or be employed by local elites as an instrument to preserve the status quo.[80] Moreover, as argued for the commons, the effects of these organizations on wealth inequality were dependent on the distribution of decision-making power within them and the exact rules they enacted.[81] In the Campine area, discussed earlier, and in Navarra and parts of Scandinavia, for instance, the rights of the commons were inclusive, widely distributed, or open to many, which did reduce inequalities. In other regions, however, the rights to the commons were linked to, and in proportion to, the distribution of private land or farmsteads, as in parts of England, Castile, the Osnabrück region, and the Po Valley,[82] an arrangement that entrenched rather than reduced existing inequalities.

Nevertheless, even in the latter cases, the rules imposed by commons or guilds did not increase wealth inequalities and may still have stopped their enlargement. Moreover, as this survey has shown, associational organizations at least had the motives and also the institutional instruments to contain or even reduce wealth inequality, the first in contrast to the premodern state and the second in contrast to the market. Only from the last quarter of the nineteenth century, with the growth of state-organized social spending and the subsequent rise of the welfare state, has a more powerful motor behind equalization emerged.[83]

[76] van Bavel, *Manors and markets*, pp. 338–40.

[77] de Keyzer, *Inclusive commons*, pp. 70–4, 99.

[78] van Zanden, 'Paradox'.

[79] For the guilds, see Ogilvie, *European guilds*, passim.

[80] For the latter, see di Tullio, 'Cooperating', pp. 99–101. See also van Onacker, *Village elites*, passim, while stressing that these elites were relatively broad.

[81] Curtis, 'Commons'; Hübner, 'Soziale Ungleichheit'.

[82] Overview by Curtis, 'Commons', pp. 652–5. See also Hübner, 'Soziale Ungleichheit'; de Keyzer, *Inclusive commons*, pp. 4–7, 44–53.

[83] Lindert, *Growing public*, pp. 171–9.

IV

The preceding sections mainly focused on the role of associational organizations themselves but did not explicitly discuss the question of whether their rules impacted on inequality patterns of societies as a whole. It is possible that these rules only contained inequalities within the organizations and their membership, while societies as a whole remained unequal, perhaps even in part as a result of exclusionary practices of the same organizations and the privileges they obtained for their members. It is also possible that an equalizing effect was only found at the local level, while larger areas remained characterized by greater inequalities. Again, this may in part even have been the result of the policies pursued by these organizations, as with guild-dominated town governments supressing economic activities in the surrounding countryside, as happened in late medieval Flanders, for instance.[84]

The first issue is somewhat easier to address than the second, and this is connected to the nature of the source material. Country-wide data on wealth inequality are missing before the second half of the eighteenth century,[85] so we have to build on figures for separate localities and regions. These cannot be projected onto large territories or countries as a whole, since the factors shaping inequality patterns differ by locality or region. Also, as discussed above, figures are dependent on the fiscal organization and the nature of the sources, and direct comparisons between figures from different regions will therefore probably offer only fake precision. Moreover, as we observed, the regions characterized by the dominance of wealth inequality-reducing institutions, which were mostly those where factor markets played a limited role and inputs were less monetized, or where property rights were divided, were also those where registration of property was weaker or only partial. Still, with these caveats in mind, we can try and make the greatest use possible of the quantitative evidence, especially by tentatively comparing figures from neighbouring but differing cases which are derived from similar sources, to see whether or not they suggest an effect of the presence of associational organizations on inequality levels within the locality as a whole.

In urban contexts, an effect can be expected especially where guilds had a large say in urban politics, as in parts of Italy in the thirteenth century and in the Low Countries and parts of Germany in the fourteenth to sixteenth centuries.[86] For Italy, the heyday of guild dominance was too early to produce reliable sources, but for north-western Europe there are some indications of its effects. One study even offers a kind of test within a comparative framework, as it compares wealth inequalities in three cloth centres in the south of Flanders/north of present-day France in the sixteenth century. Despite the position and exclusionary character of the guilds there, inequality turns out to have been substantially lower in Armentières than in a neighbouring cloth centre of similar size where guilds and corporatism were weaker. Interestingly, industries were more open and inclusive in the latter, but wealth inequality grew much faster.[87]

At a larger-scale level, it can be observed that in early modern Holland, where the political role of the craft guilds had always been very limited, the rise of factor markets went along with rising wealth inequality, while this did not happen in the southern Low Countries, where guild influence on politics stayed in place for longer than in the north. In Holland, the Gini (based on the rental values of houses, so *under*estimating actual wealth inequality) went up from 0.5 in 1514 to 0.56

[84] van Bavel, *Manors and markets*, pp. 346–9.

[85] As discussed by Alfani, ‘Economic inequality in preindustrial times’, pp. 13–15.

[86] For this influence on local government, see Ogilvie, *European guilds*, pp. 36–82.

[87] van der Meulen, ‘Get rich’, pp. 51–8.

in 1561 and 0.61 in 1740.[88] In the southern Low Countries (Flanders and Brabant), inequality in the towns remained more limited and rather stable, at Ginis of around 0.5, up to the eighteenth century.[89] Research on pre-industrial Germany also offers an indication of the effect of guild power on wealth inequality. The only German town for which a substantial decline in wealth inequality in the fifteenth to seventeenth centuries is found, Schwäbisch Hall,[90] was indeed a town where guild influence in local economy and politics in this period was decidedly strengthened, instead of eroded as in most towns.

The role of associations and independent middling groups, and of wealth-limiting arrangements, in the same period can also be clearly observed in fishermen's villages and towns along the North Sea coast, as noted earlier. Figures are very scarce, but the effect on inequality is suggested by the observation that in fifteenth-century Flanders, out of 19 communities investigated, economic inequality was lowest in the two fishing communities in the sample.[91]

The most conspicuous cases of associational prominence, however, were the regions with strong commons. Even though the commons could sustain existing inequalities, as discussed in the previous section, in several cases they kept them at low levels. The Campine region in the fifteenth and sixteenth centuries is an example. Private land was not equitably distributed in every village,[92] but generally low levels of inequality prevailed. Villages there had Ginis of (private) wealth distribution of 0.5–0.56 and had only a small number of peasant households that owned no land or possessed more than 10 hectares.[93] Importantly, however, these figures do not include the rights and benefits of the use of extensive wastelands in common, which were inclusive and broadly distributed. Even lower levels of inequality may have prevailed in regions where an inclusive organization of communal land was combined with strict forms of partible inheritance, as in many parts of Germany. Calculations for a group of villages in Hessen show that in the seventeenth and eighteenth centuries these indeed had an extraordinarily equal distribution of the surface area of arable land (so not full wealth), at Ginis varying between 0.28 and 0.32, with only one village standing out at a Gini of 0.44.[94] Exceptionally, total numbers of households in these villages are recorded in another source, which enables us to estimate the number of landless households. They were few, and Ginis including landless households thus remain very low, that is, only two percentage points higher on average.

The effect of the rules and organizations of middling peasants can also be observed in Tuscany, where wealth inequality levels in 1427, calculated on the basis of the extensive *Catasto*, show a contrast between the mountainous and hilly areas around Pistoia, at a Gini of 0.52–0.53, the plains at 0.63, the small Tuscan towns at 0.71–0.75, and Florence at 0.79.[95] Scheidel notes this difference and

[88] van Zanden, 'Tracing', pp. 650–4, who takes these rental values as a proxy of *income* inequality.

[89] Alfani and Ryckbosch, 'Growing apart', pp. 145–7.

[90] Alfani et al., 'Economic inequality', p. 21, and p. 16 for the following.

[91] The communities were Lombardzijde and Bredene; Lambrecht and Ryckbosch, 'Economic inequality', pp. 213–17. See online app. S1 for the full list.

[92] See the example of Rijkevorsel given by Lambrecht and Ryckbosch, 'Economic inequality', pp. 222–3, which they base on van Onacker, *Village elites*, pp. 70–4, but without accounting, firstly, for the use of commons and, secondly, for the fact that the rich paid more than their wealth share there. See also section II of this article.

[93] van Onacker, *Village elites*, pp. 50–4; de Keyzer, *Inclusive commons*, pp. 25–7, 71, 77. See also van Bavel, 'Looking', pp. 452–4.

[94] Trossbach, *Bauernbewegungen*, pp. 100–1, and total numbers on p. 51. Own calculation of Ginis, based on figure there and additional information provided by the author (11 Feb. 2020). See online app. S1 for the figures.

[95] The *Catasto* is a property registration for fiscal purposes. van Zanden, 'Tracing', p. 645. See online app. S1 for the figures.

suggests the relatively low figure found for the mountainous areas was a result of their poverty, but actually these areas were quite flourishing, with a diversified and productive economy.[96] Rather, the lower wealth inequality resulted from the rules upheld by the resilient peasant communities there, including the organization of rights to the commons, grazing rights, and strict regulations for using the forest and fields, while these rules were weak in the plains directly surrounding Florence and Pistoia.[97]

Another group of regions where middling groups often obtained, or received, a strong position, resulting in relatively equal distributions of landownership and broad opportunities for self-organization, were those that were newly occupied in large-scale colonization processes, in the twelfth to fourteenth centuries in particular. In Holland, which was largely a marshy wilderness, the princely overlords tried to attract people to occupy and reclaim this inhospitable area by granting them favourable, and equitable, conditions for settlement. The colonists who carried out the clearing work were granted freedom and in practice became owners of the land, which was divided into family holdings of equal size.[98] The resulting dominance of a free, landowning peasantry in Holland long remained a characteristic of the region. It was sustained by the development of communal associations for water management, charity, fiscal matters, and local decision making, and the associated dominance of small- and medium-sized peasant property, with only a small number of landless.[99] Only in the sixteenth century was this situation eroded through a process of proletarianization and the accumulation of land by urban investors.

The areas along the German North Sea coast were also reclaimed in the twelfth to fourteenth centuries and they, too, became dominated by free farmers, whose family-sized holdings covered two-thirds to three-quarters of the cultivated area, as later figures suggest.[100] This relatively equitable situation, which was reinforced by broad political participation and egalitarian inheritance rules, was only eroded from the sixteenth century onwards, when market forces became more prominent and the number of cottagers and wage labourers grew. Even the German colonization further east, which was partly undertaken in a more violent, military way, resulted in equitable distributions in the colonist villages. Despite possible processes of division, accumulation, and sales, German colonist villages in Pomerania, Brandenburg, and Silesia long retained much of their equity. Surveys from the fourteenth and fifteenth centuries show that these villages had a very equal division of the surface area of arable land, at Ginis varying from 0.19 to 0.26.[101]

The fact that large-scale colonization in this period did not necessarily result in low levels of wealth inequality can be observed for the Iberian Peninsula and its massive southward conquest and colonization movement. Concrete figures on wealth distribution in this period are lacking but we can get an impression. A situation of relative equity was found in the northern parts, such as the Duero Valley and the area between the rivers Duero and Tagus, which were slowly conquered in the ninth to twelfth centuries and became largely populated by free, smallholding peasants.[102] This relative equity was underpinned by the role of organizations there, which were partly formed in a bottom-up process, including those for the management of the extensive common lands, as

[96] Scheidel, *Great leveler*, p. 93. However, for the economic florescence of this area, see Curtis, 'Florence and its hinterlands'.

[97] For the Casentino area, see Curtis, 'Florence and its hinterlands'.

[98] van der Linden, *De cope*, pp. 20–5, 93–5, 160–82.

[99] van Bavel, *Manors and markets*, pp. 84–5, 242–51, also for the following.

[100] van der Linden, *De cope*, pp. 173–82; Knottnerus, 'Yeomen and farmers', pp. 156–8.

[101] Calculated on the basis of Kuhn, *Vergleichende Untersuchungen*, pp. 73–83. See the appendix for the full list.

[102] Oto-Peralías and Romero-Ávila, 'Economic consequences', pp. 413–14.

has been shown for the Dueñas area.[103] Other areas of the Peninsula, however, already had large populations who mostly remained there, including parts of the Muslim population. These areas were not gradually occupied but swiftly conquered by force, giving the nobility a greater weight in the process and leading to unequal patterns.

The latter were most pronounced in the south of Castile and Andalusia. Here, too, the original idea in the thirteenth century was to repopulate the conquered areas with free peasants in possession of their own medium-sized holdings; they were then expected to act as peasant-soldiers in the defence of these frontier areas.[104] However, the semi-permanent insecurity and violence in these border lands between Christian and Muslim territories quickly led to a dominant role for the military elite. This elite expropriated, appropriated, and bought up land, leading to the rise of large-scale landownership and the genesis of high levels of inequality, which remained in place up to and into the modern period, as three-quarters of the population consisted of landless labourers.[105] The broader context in which new societal constellations were formed, including the role of associational organizations in this development, may be argued to have been more decisive for inequality outcomes than the colonization process per se.

This survey is not comprehensive, of course, but while surveying the literature we did not come across a single case in pre-industrial western Europe with a strong presence of associational organizations where levels of wealth inequality were relatively high, compared to similar cases with a weaker presence. These associational constellations were generally formed in the twelfth to fourteenth centuries, while the rise of centralized states and of markets for land, labour, and capital in the following centuries gradually eroded their position. While the disequalizing effect of the rise of states and their fiscal systems is extensively discussed elsewhere,[106] the cases discussed earlier—whether the North Sea fishing communities, rural Holland, the Württemberg villages, or the rural areas directly surrounding the northern Italian towns—also point to the role of emerging input markets.

Still, there is an exception to this disequalizing effect of market dominance. Towards the end of the period under discussion, some agrarian regions with thriving markets for lease, labour, and agricultural output actually saw the return of landowning middling groups, not as a result of self-organization or deliberate political choices, but through economic factors. In several parts of the Low Countries, around the middle of the eighteenth century, tenant farmers saw opportunities for agrarian entrepreneurship and used their growing surpluses to buy up land, including their former lease land, and thus became landowning, middling farmers. This happened first in the Dutch river area, and later also in coastal Flanders and Zeeland, all in a market-dominated context.[107] Even though bottom-up organization played no direct role in this, it is relevant to note that farmers in these regions could make use of economic opportunities because they were free and had some social and political leverage, thus building on social gains made in earlier periods.

No concrete figures exist, but we may surmise that this rise of wealth-owning middling groups reduced wealth inequality there, especially where partible inheritance led to the subsequent division of their newly acquired landholdings. On the other hand, the process did not create an equal

[103] Justo Sánchez and Martín Viso, 'Territories'.

[104] Cabrera, 'Medieval origins', pp. 466–7, 472–4. See also Furió et al, 'Measuring', pp. 173–4, referring to the older work by Claudio Sánchez Albornoz.

[105] Oto-Peralías and Romero-Ávila, 'Historical frontiers'; Oto-Peralías and Romero-Ávila, 'Economic consequences', stressing the rapidity of the conquest as a factor. See also Cabrera, 'Medieval origins', pp. 474–9.

[106] Alfani and di Tullio, *Lion's share*, pp. 132–55 and passim.

[107] Brusse, *Overleven door ondernemen*, pp. 126–33, 185–7; Priester, *Geschiedenis*, pp. 144–52.

society either, since at the same time in these regions a substantial stratum of proletarianized labourers remained or even grew in size.[108] This leads to a final observation. Lower levels of wealth inequality in the late medieval and early modern period are mainly associated with well-established middling groups, but this does not say a lot about the economic well-being or ownership of lower groups. It does, however, show the extent to which middling groups were able to defend their interests against feudal and state elites, especially by way of their successful self-organization and the development of strong horizontal associations.

V

After this survey, it is time to return to the larger picture of pre-industrial wealth inequality. The preceding discussion shows that changes in wealth inequality cannot be seen as separate from social actors and the interaction, or conflicts, between them. In pre-industrial western Europe, the self-owning middling groups in particular were prominent actors, and in many regions they succeeded in defending their position and their property through their organizations. This sometimes happened at the expense of lower groups, but also at the expense of feudal or other elites among whom wealth ownership would otherwise have been concentrated. It may be surmised, and it is also suggested by scattered quantitative information and by the various lenses used throughout this survey, that without this position and the related rules, wealth inequality in these regions would have been higher. First, even if associational organizations did not reduce existing inequalities but rather sustained them, this still meant stopping inequalities from growing, as otherwise would probably have happened under the influence of the inequality-fostering processes of the period. Without the associational organizations, a substantial group of people would have been much less able to defend their property, economic independence, and political leverage against the effects of centralizing states, regressive tax systems, skewed factor markets, urbanization, and other disequalizing factors. Outsiders and non-members were excluded, as observed throughout this article, but still, these associational organizations defended middle-class wealth against feudal elites, state elites, and market elites, who otherwise, as may at least be speculated, would have been able to accumulate larger shares of wealth than in a situation without these associational organizations.

At that, these organizations did enlarge wealth equality among their members, through setting caps on wealth ownership, relatively equitable taxation (especially compared to regressive state taxation), and the relatively broad access to corporate resources and property that was granted to members. Again, outsiders and non-members were excluded, but members did form a substantial share of total population. Neither of these inequality-dampening effects would have been present without independent associational organizations, even though the extent of these effects depended, clearly, on the degree of inclusiveness and the exact rules for decision making of the organizations in question. The article further suggests, based on the cases surveyed here, that these effects on wealth inequality were widespread. Associational organization was a widespread feature of many parts of western Europe, especially from the thirteenth to sixteenth centuries, both in town and countryside. It may be surmised that the effects were more than an 'island phenomenon', even though checking the figures found for separate localities or smaller regions for larger areas is difficult, on account of the source limitations discussed earlier.

[108] For Zeeland: Priester, *Geschiedenis*, pp. 89–110, 492–500.

The position of the same associational organizations and of the middling groups who formed the main share of their members was slowly eroded during the early modern period in particular. The effects were observed in virtually all the cases surveyed here, even though they did not occur with uniform speed and intensity, or without opposition and conflict. This survey also suggests that, alongside the development of central states, the rise of factor markets especially played a role in this process; a role that, arguably, is not highlighted sufficiently and or analysed systematically enough in the present debates on pre-industrial inequality. It would perhaps be enriching to create a better link between the present debates on wealth inequality and the older historiography on proletarianization and the transitions to capitalism, and also that on social movements and revolts, as well as the debates on these topics that were flourishing in the 1970s and 1980s.

This study also suggests that our view on wealth inequality in the pre-industrial period may be somewhat unbalanced by the fact that by far the most figures and recent studies relate to those parts of northern Italy and the Low Countries where factor markets developed early and acquired a dominant position in the allocation of land, labour, and capital. This focus is perhaps also due to the fact that many non-market settings had property rights that were not absolute and do not lend themselves easily to calculations of inequality expressed in one Gini or simple measure. These calculations therefore tend to focus on market-dominated contexts, such as northern Italy from the fourteenth century and the western parts of the Low Countries from the sixteenth century,[109] where the sources record the monetary value of absolute, private property rights. Moreover, calculations that do exist for contexts where the market played a smaller role might skip or bypass parts of the bundle of property rights which were not marketable and are not easily converted into monetary measures, such as the right to graze stubble, glean, or use wasteland, and thus may easily lead to an overestimation of the levels of wealth inequality.

In parts of western Europe where the role of markets remained more limited and horizontal associations played a large part in economic life, thus enabling middling groups to protect their ownership better, patterns of wealth inequality may thus have been different in chronology and intensity than generally assumed. This also points to the risk of generalizing the present conclusions for pre-industrial western Europe to other parts of the globe. Developments may have been fundamentally different in parts of eastern Europe, with a more important role played by the manorial system, or in highly developed areas elsewhere in the world such as in China or Japan, where strong states protected landowning peasants who paid substantial taxes to the same state, and even more so when this was combined with partible inheritance rules and the practice of adoption.[110] Developing an eye for differential developments within Europe, instead of essentializing the 'European experience', may also enrich thinking about developments in non-European societies for which less source material for pre-industrial periods is available. This brief survey has tried to show that even for a well-researched part of the globe like western Europe, which is blessed with relatively abundant sources, it may be fruitful to add the perspective of associational organization in a more systematic way, in order to improve our understanding of patterns of wealth inequality.

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[109] For the dominance of factor markets in these two areas, see van Bavel, *Invisible hand?*, pp. 101–11, 154–70.

[110] For the inequality-reducing effect, see Kumon, 'Deep roots', pp. 30–46 and app. F.

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REFERENCES

Alfani, G., 'Economic inequality in northwestern Italy: a long-term view (fourteenth to eighteenth centuries)', *Journal of Economic History*, 75 (2015), pp. 1058–96.

Alfani, G., 'Economic inequality in preindustrial times: Europe and beyond', *Journal of Economic Literature*, 59 (2021), pp. 3–44.

Alfani, G., Gierok, V., and Schaff, F., 'Economic inequality in preindustrial Germany, ca. 1300–1850', Stone Center on Socio-economic Inequality working paper, 3 (2020).

Alfani, G. and Ryckbosch, W., 'Growing apart in early modern Europe? A comparison of inequality trends in Italy and the Low Countries, 1500–1800', *Explorations in Economic History*, 62 (2016), pp. 143–53.

Alfani, G. and Di Tullio, M., *The lion's share: inequality and the rise of the fiscal state in preindustrial Europe* (London and New York, 2019).

van Bavel, B. *Manors and markets: economy and society in the Low Countries, 500–1600* (Oxford, 2010).

van Bavel, B., *The invisible hand?: How market economies have emerged and declined since AD 500* (Oxford, 2016).

van Bavel, B., 'Looking for the islands of equality in a sea of inequality. Why did some societies in pre-industrial Europe have relatively low levels of wealth inequality?', in G. Nigro, ed., *Disuguaglianza economica nelle società preindustriali: cause ed effetti* (Prato, 2020), pp. 431–56.

van Bavel, B. and Rijpma, A., 'How important were formalized charity and social spending before the rise of the welfare state? A long-run analysis of selected western European cases, 1400–1850', *Economic History Review*, 69 (2016), pp. 159–87.

Berman, H. J., *Law and revolution. The formation of the Western legal tradition* (Cambridge, Mass., 1983).

Brusse, P., *Overleven door ondernemen: de agrarische geschiedenis van de Over-Betuwe 1650–1850* (Arnhem, 1999).

Cabrera, E., 'The medieval origins of the great landed estates of the Guadalquivir valley', *Economic History Review*, 2nd ser., XLII (1989), pp. 465–83.

Cerman, M., Maur, E., and Zeitlhofer, H., 'Wirtschaft, Sozialstruktur und Besitztransfer in frühneuzeitlichen gutsherrschaftlichen Gesellschaften in vergleichender Perspektive: Ergebnisse des Projekts "Soziale Strukturen in Böhmen"', in M. Cerman and H. Zeitlhofer, eds., *Soziale Strukturen in Böhmen. Ein regionaler Vergleich von Wirtschaft und Gesellschaft in Gutsherrschaften, 16.–19. Jahrhundert* (Vienna and Munich, 2002), pp. 262–85.

Cooper, J. P., 'Patterns of inheritance and settlement by great landowners from the fifteenth to the eighteenth centuries', in J. Goody, J. Thirsk, and E. P. Thomson, eds., *Family and inheritance: rural society in western Europe, 1200–1800* (Cambridge, 1976), pp. 192–327.

Curtis, D. R., 'Florence and its hinterlands in the late middle ages: contrasting fortunes in the Tuscan countryside, 1300–1500', *Journal of Medieval History*, 38 (2012), pp. 472–99.

Curtis, D. R., 'Did the commons make medieval and early modern rural societies more equitable? A survey of evidence from across western Europe, 1300–1800', *Journal of Agrarian Change*, 16 (2016), pp. 646–64.

Fochesato, M., Bogaard, A., and Bowles, S., 'Comparing ancient inequalities: the challenges of comparability, bias and precision', *Antiquity*, 93 (2019), pp. 853–69.

Fochesato, M. and Bowles, S., 'Nordic exceptionalism? Social democratic egalitarianism in world-historic perspective', *Journal of Public Economics*, 127 (2015), pp. 30–44.

Fritschy, W., *Public finance of the Dutch Republic in comparative perspective: the viability of an early modern federal state (1570s–1795)* (Leiden, 2017).

Fritschy, W., 't Hart, M., and Horlings, E., 'Long-term trends in the fiscal history of the Netherlands, 1515–1913', in B. Yun-Casalilla and P. K. O'Brien, eds., *The rise of fiscal states: a global history, 1500–1914* (Cambridge, 2012), pp. 39–66.

Furió, A., Viciano, P., Almenar Fernández, L., Ruiz Domingo, L., and Chismol, G., 'Measuring economic inequality in southern Europe: the Iberian Peninsula in the 14th–17th centuries', in G. Nigro, ed., *Disuguaglianza economica nelle società preindustriali: cause ed effetti* (Prato, 2020), pp. 169–201.

García Montero, H., 'Wealth inequality in Catalonia, 1400–1800. Sources, data and a case study', in G. Nigro, ed., *Disuguaglianza economica nelle società preindustriali: cause ed effetti* (Prato, 2020), pp. 431–56.

't Hart, M. C., *The making of a bourgeois state: war, politics and finance during the Dutch Revolt* (Manchester, 1993).

Hübner, J. 'Soziale Ungleichheit in einem ländlichen Ressourcenregime der Frühen Neuzeit. Die Essener Mark bei Osnabrück', in N. Grüne, J. Hübner, and G. Siegl, eds., *Ländliche Gemeingüter. Kollektive Ressourcennutzung in der europäischen Agrarwirtschaft (Jahrbuch für Geschichte des ländlichen Raumes 2015)* (Innsbruck, Vienna, and Bozen, 2016), pp. 150–62.

Huff, T. E., *The rise of early modern science: Islam, China, and the West* (3rd edn., Cambridge, 2017).

Jones, P. J., *The Italian city-state: from commune to signoria* (Oxford, 1997).

Justo Sánchez, D. and Martín Viso, I., 'Territories and kingdom in the central Duero basin: the case of Dueñas (tenth–twelfth centuries)', *Journal of Medieval Iberian Studies*, 12 (2020), pp. 177–98.

De Keyzer, M., '"All we are is dust in the wind": the social causes of a "subculture of coping" in the late medieval coversand belt', *Journal for the History of Environment and Society*, 1 (2016), pp. 1–35

De Keyzer, M., *Inclusive commons and the sustainability of peasant communities in the medieval Low Countries* (New York, 2018).

Knottnerus, O. S., 'Yeomen and farmers in the Wadden Sea coastal marshes, *c.* 1500–1900', in B. van Bavel and P. Hoppenbrouwers, eds., *Landholding and land transfer in the North Sea area (late middle ages–19th century*) (Turnhout, 2004), pp. 149–86.

Körner, M., 'Expenditure', in R. Bonney, ed., *Economic systems and state finance* (Oxford, 1995), pp. 393–422.

Kuhn, W., *Vergleichende Untersuchungen zur Mittelalterlichen Ostsiedlung*, Ostmitteleuropa in Vergangenheit und Gegenwart, 16 (Cologne and Graz, 1973).

Kumon, Y., 'The deep roots of inequality', Dondena working paper, 135 (2019).

Kuran, T., 'Why the Middle East is economically underdeveloped: historical mechanisms of institutional stagnation', *Journal of Economic Perspectives*, 18 (2004), pp. 71–90.

Lambrecht, T. and Ryckbosch, W., 'Economic inequality in the rural Southern Low Countries during the fifteenth century: sources, data and reflections', in G. Nigro, ed., *Disuguaglianza economica nelle società preindustriali: cause ed effetti* (Prato, 2020), pp. 205–29.

van Leeuwen, M. H. D., 'Guilds and middle-class welfare, 1550–1800: provisions for burial, sickness, old age, and widowhood', *Economic History Review*, 65 (2012), pp. 61–90.

van der Linden, H., *De cope: bijdrage tot de rechtsgeschiedenis van de openlegging der Hollands-Utrechtse laagvlakte* (Alphen aan den Rijn, 1956).

Lindert, P. H., Growing public: social spending and economic growth since the eighteenth century*, 1:* the story (Cambridge, 2004).

Marnef, G., 'An experiment of social equality?: The case of the Calvinist Republic in Antwerp (1577–1585)', in B. Blondé, S. Geens, H. Greefs, W. Ryckbosch, T. Soens, and P. Stabel, eds., *Inequality and the city in the Low Countries (1200–2020)* (Turnhout, 2020), pp. 185–97.

van der Meulen, J., 'Get rich and try dyeing: cloth production and social inequality in town and countryside (sixteenth century)', in B. Blondé, S. Geens, H. Greefs, W. Ryckbosch, T. Soens, and P. Stabel, eds., *Inequality and the city in the Low Countries (1200–2020)* (Turnhout, 2020), pp. 45–62.

Milanovic, B., *Global inequality: a new approach for the age of globalization* (Cambridge, Mass. and London, 2016).

De Moor, T., 'The silent revolution: a new perspective on the emergence of commons, guilds, and other forms of corporate collective action in western Europe', *International Review of Social History*, 53, S16 (2008), pp. 175–208.

De Munck, B., 'Equality, rights and community: a long term perspective', in F. Levrau and N. Clycq, eds., *Equality. multidisciplinary perspectives* (2021), pp. 103–34.

Neveux, H., *Vie et déclin d'une structure économique: les grains du Cambresis, fin du XIVe-début du XVIIe siécle* (Paris, 1980).

Nigro, G., ed., *Disuguaglianza economica nelle società preindustriali: cause ed effetti* (Prato, 2020).

Ogilvie, S., *The European guilds: an economic analysis* (Princeton, NJ, 2019).

van Onacker, E., *Village elites and social structures in the late medieval Campine region* (Turnhout, 2017).

Oto-Peralías, D. and Romero-Ávila, D., 'The economic consequences of the Spanish Reconquest: the long-term effects of medieval conquest and colonization', *Journal of Economic Growth*, 21 (2016), pp. 409–64.
Oto-Peralías, D. and Romero-Ávila, D., 'Historical frontiers and the rise of inequality: the case of the frontier of Granada', *Journal of the European Economic Association*, 15 (2017), pp. 54–98.
Piketty, T., *Capital and ideology* (Cambridge, Mass., 2020).
Prak, M., *Citizens without nations: urban citizenship in Europe and the world, c. 1000–1789* (Cambridge, 2018).
Priester, P. R., *Geschiedenis van de Zeeuwse landbouw circa 1600–1910* (Wageningen, 1998).
Sabean, D. W., *Property, production, and family in Neckarhausen, 1700–1870* (Cambridge, 1990).
Scheffer, M., van Bavel, B., van de Leemput, I. A., and van Nes, E. H., 'Inequality in nature and society', *Proceedings of the National Academy of Sciences*, 114 (2017), pp. 13154–7.
Scheidel, W., *The great leveler: violence and the history of inequality from the Stone Age to the twenty-first century* (Princeton, NJ, 2017).
Soens, T., 'Explaining deficiencies of water management in the late medieval Flemish coastal plain (13th–16th centuries)', in H. Greefs, ed., *Water management, communities, and environment: the Low Countries in comparative perspective, c. 1000–c. 1800* (Hilversum, 2006), pp. 35–61.
Stayer, J. M., *The German Peasants' War and Anabaptist community of goods* (Montreal, 1994).
Tits-Dieuaide, M. J., 'Les tables des pauvres dans les anciennes principautés belges au moyen âge', *Tijdschrift voor Geschiedenis*, 88 (1975), pp. 562–83.
Trossbach, W., *Bauernbewegungen im Wetterau-Vogelsberg-Gebiet, 1648–1806: Fallstudien zum bäuerlichen Widerstand im Alten Reich*, Quellen und Forschungen zur hessischen Geschichte, 52 (Darmstadt and Marburg, 1985).
Di Tullio, M., 'Cooperating in time of crisis: war, commons, and inequality in Renaissance Lombardy', *Economic History Review*, 71 (2018), pp. 82–105.
van Zanden, J. L., 'Tracing the beginning of the Kuznets curve: western Europe during the early modern period', *Economic History Review*, XLVIII (1995), pp. 643–64.
van Zanden, J. L., 'The paradox of the Marks. The exploitation of commons in the eastern Netherlands, 1250–1850 (Chaloner Memorial Lecture)', *Agricultural History Review*, 47 (1999), pp. 125–44.
van Zanden, J. L. and Prak, M., 'Towards an economic interpretation of citizenship: the Dutch Republic between medieval communes and modern nation-states', *European Review of Economic History*, 10 (2006), pp. 111–45.

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