The Original Road to Serfdom: From Rome to Feudal Europe

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Abstract

Hayek based his road to serfdom metaphor on an actual historical precedent: Ancient Rome. The classical historian Edward Gibbon described this original road to serfdom in 1776. Ancient Rome developed the legal institutions to support private property and commerce during the first two centuries AD. However, gradually, "bread and circuses" entitlements contributed to the crowding out of private economic activity. Rome directly commandeered labor and resources and imposed an arcane tax system. To prevent tax avoidance, emperors immobilized the tax base by tying peasants to the land and guildsmen to their crafts. These events paved the road to serfdom.

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I. Introduction

When Friedrich A. Hayek penned *The Road to Serfdom* in 1944, he dedicated the book to "socialists of all parties" ([1944] 2007). Indeed, the early twentieth century witnessed the rise of communism, corporatism, and British-styled Fabian socialism. Following the Great Depression, socialists of all parties envisioned government controls and massive entitlements as the wave of the future. The various socialists believed that their visions would bring greater economic growth and stability. But Hayek and a comparatively few other economics thought otherwise. *The Road to Serfdom* purported that economic liberty was the essential ingredient for both political liberty and economic growth. Today, we are quite familiar with Hayek's reasoning, but it was not apparent to the socialists of that day.

Powerful arguments are based on metaphors: Adam Smith's invisible hand and John Rawls's veil of ignorance are two very

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successful examples. Hayek's critique of runaway entitlements and command-style socialism needed an appropriate metaphor. He found it in an episode in European history that most of the intellectuals had studied. History was then an essential component of intellectual study—even Karl Marx had a PhD in ancient philosophy. Hayek's metaphor contended that the socialist vision was not only incorrect, but that the socialist road was tried a couple of millennia ago and it did not bring peace and prosperity. Instead, it collapsed into insular communities with lords ruling over hapless serfs.

The classical scholars were very familiar with Roman history. Edward Gibbon's 1776 masterpiece The History of the Decline and Fall of the Roman Empire (considered the foundation of modern historical studies) described how politics and economics drove the cycles of history. Following extensive military conquests, Rome's first emperor established institutions that promoted a long-lasting peace. Havek recognized the ancient Roman roots of our legal system. He credited the Roman stoic Cicero as the primary source of natural law and modern liberalism. Stoicism embraced the brotherhood of men and the injustice of slavery. First century Roman jurisprudence began to distinguish the rule of law from the rule of men, stating that the law's generality restricts the discretionary authority of judges and politicians. Hayek ([1960] 1978, p. 167) writes that this era "was also a period of complete economic freedom to which Rome largely owed its prosperity and power. From the second century A.D., however, state socialism advanced rapidly. In this development the freedom which equality before the law created was progressively destroyed as demands of another kind of equality arose. During the later empire the strict law was weakened as, in the interest of a new policy, the state increased its control over economic life." Thus, the Roman economic regression was the original road to serfdom. According to Hayek, the concept of the rule of law was lost for over a thousand vears.

Economics has advanced considerably since Hayek wrote *Setfdom*. Specifically, economics has embraced new fields: public choice, law and economics, and the new institutional economics. Douglass North (2007) has developed themes on the roles of institutions and path dependence in the course of economic development. North has stressed the importance of a legal framework in reducing transaction costs and expanding value-creating trades. Bruce Frier and Dennis Kehoe (2007) develop this theme for the ancient economies. In the pages that follow, these new tools of economics plus the works of

historians will allow us to revisit the rise of the Roman economy to its height during the Golden Age followed by its decline along the original road to serfdom.

II. The Roman Golden Age (aka Pax Romana) (circa 27 BCE to AD 180)

"If a man were called to fix the period in the history of the world during which the condition of the human race was most happy and prosperous, he would without hesitation, name that which elapsed from 27 BCE–AD 180."

-Edward Gibbon, 1776

Throughout the first century BCE, Roman political generals fought each other in a series of costly civil wars. The last of these struggles pitted Octavian, the nephew of Julius Caesar, against Antony and Cleopatra. Octavian and his generals ended the final struggle by defeating Antony at the Battle of Actium in 31 BCE. Octavian took the name and title of Caesar Augustus in 27 BCE.

Augustus ended the Roman Republic; no longer would political leaders stand for election. Under his new regime, the emperor ruled through the Senate. In theory and only at first, the Roman Senate would retain the power of the purse over the public treasury, while the emperor retained sole discretion over the imperial properties. The imperial properties included the extensive personal holdings of Augustus by virtue of his inheritance from Julius Caesar and his own military victories. The richest plum of the emperor's personal possessions was the new province of Egypt. Cicero had once estimated the public revenues of this province to exceed those of the rest of the then Roman Republic. Augustus also commanded the Roman armies, leaving the Senate much weaker compared to the emperor (Webber and Wildavsky 1986, p. 124).

Augustus reigned for forty years and established informal institutions guiding Roman governance that lasted for over a century. Augustus wanted primarily to reduce the number of potential rivals and secondarily to promote prosperity.¹ His chief rivals consisted of senators, provincial governors, tax farmers, and generals. To this end, Augustus sought to redirect entrepreneurs away from rent-seeking military conquests and toward production and trade. Before Augustus, governors sometimes initiated wars and used the spoils to threaten Rome itself. Augustus forbade generals from initiating

¹ For a lengthier discussion of the Augustan reforms, see Coats and Pecquet (2013), especially pp. 533–38.

military actions, but more importantly, he also secured control over the budget for military pay and pensions (Weber and Wildavsky 1986, p. 123). He ended the Roman Republic practice of "tax farming," or auctioning the right to collect provincial taxes to Roman corporations. Tax farmers notoriously collected more than they were due, exceeding the carrying capacity of the tax base. Since Roman aristocrats owned most foreign lands, this change enhanced Augustus's popularity among the senators (Kessler and Temin 2007, p. 317).

Augustus enacted two direct taxes to be applied throughout most of the empire: a wealth tax of 1 percent on all assessed property (land, houses, slaves, and ships) and a head tax (based upon periodic censuses) to be paid by every adult male (Starr 1982, p. 77). Moreover, Italy was exempted from both of these taxes.² Under Augustus, every taxpayer knew in advance how much his annual tax bill would be. During Pax Romana, the Augustan tax rates constrained government spending. War booty sometimes provided dividends for expensive public projects, but only after successful operations, which became infrequent during imperial rule. Every free Roman retained a full after-tax claim on his increases in income.

The Roman fiscal arrangement, however, presented a serious problem. Unlike modern governments, Rome never borrowed to make up revenue shortfalls. Whenever an emperor needed to make up for revenue shortfalls, he had two expedients: the debasement of the denarius (reducing the silver content of each coin) and/or the outright commandeering of private assets and people into public service. As the latter option became increasingly common, the rule of law receded and Rome's Golden Age lost its luster (Temin 2006, p. 146).

Researchers have tried to measure the relative size of the government's share of national output during Pax Romana. Goldsmith (1984) estimated the share of local and central governments at less than 5 percent of national product and the imperial state at less than 3 percent.³ Keith Hopkins (1980, p. 57) compared the administrative costs of governing the vast Roman Empire until about AD 200 to similar conditions under the Chinese

² The Augustan tax system continued to exempt Italy from both major taxes, and the role of indirect taxes and local taxes has not been fully considered (Cascio 2007, pp. 624–25).

³ Chester Starr (1982, p. 76) provided similar estimates of the public sector burden at about 3.5 percent of per capita income.

mandarins. In Rome, about 150 Roman aristocrats administered approximately the same territory, compared to 4,000 Chinese officials under the Mandarins.

Besides low taxes, Augustus promoted prosperity in other ways. He concluded a peace treaty with Parthia (now Iran), opening trade routes into India and China.⁴ He established a common currency, the silver denarius, which circulated throughout the empire, except in Egypt. The Augustan "peace dividend," at the expense of Egypt, financed massive public works projects, including roads and paved city streets, bridges, lighthouses, aqueducts for a running water supply, sewage disposal, fire protection, public baths, temples, and public buildings. By 100 AD, Roman technological development and market integration enabled Roman city dwellers to enjoy better material living standards than the European city dwellers did circa 1800 (Mokyr 1990, p. 20). Various economic historians measuring the extent of urbanization in Roman Italy have also compared it favorably to the seventeenth-century Netherlands (Temin 2006, p. 135). As Adam Smith demonstrated in his An Inquiry into the Nature and Causes of the Wealth of Nations ([1776] 1965), specialization and the division of labor are limited by the extent of the market. Pax Romana greatly expanded the extent of the market.

III. Roman Jurisprudence and Markets During the Golden Age

Augustus further instituted legal reforms. To check corruption and abuse by Roman magistrates (particularly tax agents), prosecutors received a percentage of the funds they recovered (Frank 1940, p. 27).

Augustus adopted a system of judicial review that curbed abuses by magistrates in civil matters. Augustus sponsored legal scholars to develop legal jurisprudence based on the Stoic tradition that Cicero had championed. As Hayek ([1960] 1978, pp. 166–67) noted, this Ciceronian-inspired jurisprudence was the basis for the rule of law championed by classical liberal scholars.

Roman jurists under the influence of Stoic philosophy held that justice was "blindfolded" and the law applied to everybody equally (Bethell 1998, p. 61). This tradition eventually produced a uniform set of laws throughout the empire designed to protect private property

⁴ The Roman transportation network connected to Parthian (Persian) roads establishing a network of inns, sea flotillas stretching all the way to India and from there to China. Romans imported spices, silks, drugs, precious stones, ivory, and parrots from the Far East (Walbank 1969, pp. 31, 34).

and contracts. This jurisprudence would be swept away during Rome's decline and forgotten for centuries until the Enlightenment revival.

As Rome expanded its borders, Roman jurists confronted a bewildering array of legal customs among the subject peoples. To bring everyone under the same laws, these jurists examined the various local legal systems and forged them into a single legal code. All subjects of the empire became citizens by AD 212; these inductively derived legal principles rooted in nature and applied equally throughout the empire became referred to as "laws of nature" or natural law. Natural law superseded local particular law called "positive law" (Pipes 1999, p. 12).

In theory, emperors retained absolute godlike power over people and property, but during the period from Caesar Augustus's reign (27 BCE-AD 14) until about AD 180, government interference remained minimal. Bethell (1998, p. 68) describes the careful attention that first-century Roman officials paid to establishing property rights: "Rural property distributed to citizens by the state was surveyed; boundaries lines were marked out, traces of which can still be seen from the air. The surveyors were subject to litigation. The resulting 'cadaster,' or publicly recorded survey, was drawn out on paper and incised on bronze; one copy was kept locally and one in Rome." Another historian described the life of a typical free Roman during the first century as follows: "A free Roman's house was his castle, his labor not directed, his children not appropriated for purposes either secular or religious, and his movement and change of domicile unrestricted" (Crook 1967, p. 259). Roman property owners even had recourse when emperors sought to take private property for eminent domain. In acquiring private land for the construction of public works, the state normally negotiated with owners (Bethell 1999, p. 70). Roman jurists developed the concept of absolute ownership called *dominium*. Dominium meant that the owner possessed the right to use and consume property as allowed by law. Roman law carefully stipulated how property could be acquired and transferred through contracts (Pipes 1999, p. 11). Likewise, the law of nuisance carefully established boundaries and liability rules between and among the property owners (Bethell 1998, p. 69).

Temin (2006, p. 134) contends that first- and second-century Romans enjoyed relatively stable political and market conditions for labor, capital, and the flow of goods, which fostered specialization and efficiency. The evidence from various researchers demonstrates that markets played a leading role during the first two centuries AD and performed the allocative function well. During the Roman Golden Age, only 15–30 percent of the grain imported into the city went toward free distribution, while the rest was sold in private markets (Temin 2006, p. 137). During this same period, an abundance of coinage was minted, and numerous references to market prices survive Temin (2001, pp. 173–74). Moreover, other studies of grain prices find them to rationally reflect costs and market adjustments. Kessler and Temin (2007, p. 139) show that wheat prices are inversely related to the distance from Rome and that price movements were highly correlated, reflecting market shocks during the first century (Geraghty 2007, p. 1045). Wages during the early Roman Empire appear to have adjusted to changes in supply and demand (Kessler and Temin 2007, p. 140).

The Romans developed a sophisticated web of private and legal remedies designed to mitigate commercial difficulties such as adverse selection, moral hazard, and the agent-principal problem that commonly arise in product and labor markets alike. The Greco-Romans also developed sophisticated financial markets, and all three markets thrived under the evolving legal structure based upon private property rights and contractual obligations. Cargos were routinely sampled to verify both the quantity and quality of the goods. Corrupt agents could be fined or punished. Roman companies kept copies of agency letters, followed trends in prices and quantities of merchandise, and carefully labeled cargo. (Kessler and Temin 2007, pp. 324–25).

Guilds also helped ensure the integrity and quality of the labor pools. At the port city of Ostia, skilled workers (boat pilots) and unskilled workers (sack carriers, longshoremen, etc.) were organized into workers associations, or guilds. Guilds were small, consisting of 19–250 members, and freely competed with each other and with nonmembers for employment. Membership was not hereditary. The guilds carefully selected their members, required oaths for honest service, and monitored performance. They expelled substandard or corrupt members. Wealthy, influential Romans sponsored certain guilds, lending to their reputation. Guilds often affiliated with temples providing civic participation for members, and temple property provided collateral to employers as assurance of their work (Kessler and Temin 2007, pp. 326–27).

First century guilds were voluntary associations that provided benefits to members and employers alike without political interference or the erection of artificial entry barriers. Temin (2006, p. 140) noted that wage rates responded to plagues and other disruptions in supply and demand. Scheidel (2004, p. 20) remarked that mobility was the most distinctive feature of Roman citizenship. Labor possessed both geographical and occupational mobility.

But what about the Romans held under chattel slavery? Slavery continued throughout the Roman era, although the numbers of slaves declined during the first century. The chief source of new slaves was military conquest, and comparatively few territorial expansions were added after Augustus. The number of slaves declined due to both emancipation and mortality. Some slaves were literally worked to death in the mines or killed in the increasingly brutal gladiatorial contests. Nonetheless, talented slaves could, and frequently did, earn enough to purchase their freedom, typically in seven years. For those with business acumen, their period of slavery provided a term of apprenticeship. Freedmen sometimes became wealthy merchants themselves (Kessler and Temin 2007, p. 318).

Although banks existed in ancient Greece (Temin 2006, pp. 143-44), their importance expanded during the early Roman Empire. Temin (2004) has examined the extensive development financial intermediation during Rome's golden days. He refers to an ancient text by a Roman financial advisor, instructing investors in basic financial fundamentals (including the concept of opportunity cost). Romans so frequently advanced loans to shipping merchants that standard forms came into practice. Religious temples functioned as Since certain temples financial intermediaries. controlled geographically dispersed endowments, they could pool assets and function as larger-scale financial institutions advancing various kinds of loans. Private partnerships functioned as depository institutions accepting both sealed (confidential) and unsealed (interest-earning deposits). Other ancient documents attest that either branch banking or interbank relationships existed (Temin 2004, pp. 719–25).

IV. The Political and Fiscal Weaknesses of Imperial Rome

Despite this economic prowess, imperial Rome contained inherent political and fiscal weaknesses that accumulated and eventually led to its downfall. The political weaknesses lay in the political system: it worked best under the first emperor: Augustus. Subsequent emperors were neither as benevolent nor as popular, and there was no recognized successor. Roman emperors tended to have short reigns and short life expectancies due to assassination and intrigue. Few emperors had the luxury to even consider the long-run consequences of their policies, which produced institutional drift. Moreover, the powerful interest groups consisted of the Senate, military, and the city mobs. There were no elections or political processes where the provinces could express their interests. Most emperors chose the path of least resistance, which was to gradually expand benefits to those closest to the palace and ignore the interests of the more distant provinces. This tendency tilted imperial policy toward benefiting Rome at the expense of the rural provinces.⁵ By the third century, Rome had started to fall into political and economic decline. No fewer than 26 emperors governed from AD 235–284. Emperors were sometimes killed and deposed by relatives, powerful politicians, or the very military set up to protect them.

Political weaknesses gradually increased Rome's fiscal burden during the first three centuries. The practice of granting free grain and circuses to the city dwellers of Rome predated Augustan imperial rule. The grain subsidy actually began as a veterans benefit for soldiers returning to the city instead of land entitlements granted to retiring soldiers in the provinces. Politicians soon expanded the cheap grain entitlement to free grain, and benefits were extended to all male city dwellers. Both Julius Caesar and Augustus tried to control the cost of free grain distributions by eliminating noncitizens from participating and issuing tickets to prevent double-dipping. Emperors tended to expand entitlements to appease city mobs: free grain became baked bread, and oil, wine, and pork entitlements were added (Walbank 1969, p. 72). By 212, all adult males were granted citizenship with rights to city entitlements (Rommen [1936] 1998, p. 3). But by then, other cities, notably Alexandria, Antioch, and Constantinople, had adopted Roman style benefits for city dwellers, as well (Jones 1986, pp. 696–97).

Emperors were expected to please the city dwellers by expanding and enhancing the Roman games and circuses. Free entertainment included animal hunts, gladiator fights, and bloody executions. At first the games were relatively rare, as they were only held on official

⁵ Dictatorships tend to increase spending on those residing in capital cities compared to those residing in more distant provinces. Those in close proximity to rulers have greater influence under dictators than in democracies, where rural residents have the franchise. Ades and Glaeser (1995) indicate that central cities are 50 percent larger under dictatorships than under democracies.

holidays. But successive emperors added holidays and increased the spectacles. When the Roman Coliseum was opened in AD 80, the games were held ninety days during the year and they sometimes lasted all day. During a given game day, hundreds of people and thousands of animals were slaughtered. Emperors kept increasing holidays and games to gain the favor of the city masses, but this along with the dole increased the fiscal burden on the provinces. Moreover, the spectacles continued until long after Roman economic decline. Games continued even after the Emperor Constantine converted to Christianity during the early 300s. The Coliseum held gladiator fights until AD 404, but animal hunts and human executions continued until 523. The chariot races at Circus Maximus continued until 549, long after Rome had lost the ability to collect taxes and defend its borders (Cartwright 2012, 2013).

The expansion of entitlements had consequences. Since political power (the emperor's favor) was skewed in favor of urban areas over the grain producing rural provinces, as the Roman economy declined, a vicious cycle followed. This exploitation began with Augustus's seizure of much of the grain from Egypt. When Augustus took over Egypt following his victory at Actium, Egypt had already been suffering from mismanagement and decline from centuries of Ptolemaic rule (Frank 1940, p. 12; Milne 1927, p. 2). Roman authorities monopolized certain Egyptian trades, including goldsmiths and bricklayers, in order to charge hefty fees and soak up most of the profits (Johnson 1936, pp. 326-31). The Roman rulers assigned production quotas to Egyptian grain farmers and appointed wealthy Egyptians to administer the collection of Roman revenues. Any shortfalls had to be made up by the Egyptian magistrates. To prevent wealthy Egyptians from migrating, the Romans imposed a special currency control upon Egypt only. The Roman denarius did not circulate in Egypt. Under Augustus, the Egyptian drachma was a type of fiat coinage that was worth only 25 percent of its value outside of Egypt. Egyptian magistrates wanting to sell out and disappear into the night would lose 75 percent of their wealth (Milne 1927, pp. 4-5). Over time, Roman rulers failed to timely adjust grain quotas for periodic shortfalls and exceeded the sustainable yields of the tax base. Economic historian Richard Muth (1994, pp. 210-24) measured the decline in Egyptian wages and property values. He found a 10 percent decline in real wages from AD 1 to 125. Real rents fell markedly during the second and third centuries, by 23 percent and then by another 30 percent.

V. The Compulsory Economy: Paying for the Roman Welfare State

"There is no such thing as a free lunch. Somebody always pays." —Milton Friedman

Another ancient historian, Frank W. Walbank (1969), connected the expansion of Roman urban entitlements to the establishment of a compulsory economy. Since Augustan tax rates were not increased and Rome did not sell bonds, the expansion of entitlements resulted in the direct commandeering of labor and resources to provide benefits. For example, during the late second century, when an emperor expanded the dole from free grain into baked loaves, bakers were cashiered into compulsory service. Bakers lost the right to contract independently and every new entitlement imposed compulsory service upon other guilds. "Free stuff" for Roman city dwellers meant enslavement for unseen servants in distant lands. Although the guild members owned their own tools, they had to give priority in selling wares or services to the state and at statedetermined prices. Over time, compulsory guilds (aka *collegia*) covered the entire supply chain, taking grain back to Rome. They impressed into compulsory guilds muleteers, groomsmen, stables, and veterinary surgeons to ensure the timely arrival of grain from the provinces. Forced labor also built the stables for the mules and oxen (Walbank 1969, pp. 73).

Members were prohibited from leaving their guilds. Roman entitlement demands transformed the nature of guilds from free associations providing mutual benefits to workers and employers alike into compulsory serfs without the freedom to move. Moreover, whenever some guildsmen managed to flee to parts unknown, the remaining members were required to take up the slack and retain the same production levels. Further controls made guild membership hereditary. Sons were required to replace their fathers and daughters were required to marry within their father's guilds. By the fourth century, guild membership became mandatory for all trades; innkeepers, fishmongers, potters, and silversmiths lost the right to contract independently. A Roman penalty was enacted to assign guild membership to anyone not enrolled (Walbank 1969, pp. 73–74).⁶

⁶ The Edict of AD 380 required that members of certain trades be branded like cattle for identification (Walbank 1969, p. 79).

VI. Diocletian's Price Controls, A New Tax System, and the Formal Adoption of Serfdom under Constantine

As the Roman welfare state expanded, the free market economy shrank. A good barometer of this decline can be seen in the debasement of the Roman denarius. Emperors invariably followed the expedient practice of reducing its silver content to meet revenue shortfalls while continuing to pay their soldiers. The silver content of the denarius fell from 94 percent in AD 54 to 50 percent in 193 and again to .02 percent by 268. By the time of Diocletian (circa 300), the bronze denarius became bulky and awkward for most trades, and its official trade rate was less than half of the black market rate (Michell 1947, pp. 1–12).

The Emperor Diocletian blamed the price increases on selfish, greedy merchants, rather than his own monetary debasement. In AD 301, he announced a wage and price control edict. According to historian Frank Abbot (1911, pp. 150–51), Diocletian "boldly fixed the maximum prices at which beef, grain, eggs, clothing, and other articles could be sold and also the wages that all sorts of workers could receive and prescribed the death penalty for anyone who sold their wares at higher prices." Despite the death penalty, merchants increased their prices to stay in business. But when the public realized that shopkeepers were subject to the death penalty for excessive prices, they mobbed the shops looting them of their wares. After that, shops closed, and goods could only be obtained clandestinely (Kent 1920, pp. 39-40). City dwellers departed to find work in the countryside, where they hoped to avoid starvation. After four years and many executions, Diocletian rescinded the price edict. But the damage had already been done. Rome's town shops were decimated and cities depopulated.

With the currency debased and the trading economy contracted, the old Augustan tax system of head taxation and minimal flat-rate wealth taxes could not suffice. To support the empire, Diocletian devised a new tax system that fashioned a top-down centrally planned spending and taxing apparatus independent of private markets and lacking the essentials for economic calculation. The change from the first century Augustan poll and wealth taxes to Diocletian's highly bureaucratic tax base with uncertain tax rates highlights the difference between the "rule of law" during the first century (everyone's tax obligations could be known in advance and state revenue was limited) to a despotic taxing system under Diocletian that imposed uncertain and potentially unlimited claims upon the taxpayers.

Accordingly, Diocletian's new fiscal regime enabled the Roman bureaucracy and military to submit their funding demands to the emperor and created a new vast Roman bureaucracy of tax assessors empowered to meet these increasing demands. Mathematically, the budget request was to be matched by the product of the tax base times the tax rate needed to meet the budgetary demands. The tax base was measured by the imperial bureaucrats in taxable units called *caputs*. Bureaucrats inspected the tax base periodically, every five years at first, but later every fifteen years (Williams 1985, p. 120). Tax assessors assigned caputs based on arbitrary scales supposed to measure the productivity of resources: one caput equaled an ordinary laborer's productivity, skilled workmen accounted for more, and women and children for less. Animals and land acreage were also assessed based on official productivity scales. The number of caputs assigned to each plantation, small farmer, and other taxpaying unit multiplied by the tax rate determined the taxpayer's liability. The necessary tax rate called the *indicitio* was computed each year according to the formula budget request. For example, if the total caputs in the empire added up to five million and the budget request equaled five hundred thousand sesterces,⁷ then the annual tax rate would be one-tenth of a sesterce per caput. But if the budgetary request doubled, so would the tax rate. Consequently, labor mobility directly threatened the fairness and the very applicability of the tax system itself (Jones 1966, p. 35; Frank 1927, p. 501).

Constantine succeeded Diocletian and is chiefly remembered for ending the religious persecution of Christians in AD 313, but he was the same emperor who in 332 officially decreed all peasants and their children: *glebe adscripti*, bound to the land as perpetual serfs. Serfdom was not established on a whimsical desire by a necessarily cruel emperor, however; peasants were tied to the land as an essential feature of the caput tax base system. Giardina (2007, pp. 749–51) describes the erosion of legal rights following Constantine's rule. Initially, the *colonus* (serfs) were small tenant farmers who were formally free but lacked one fundamental requisite of the condition of full freedom: the ability to abandon their workplace and move elsewhere. "In time, other restrictions were added regarding, for example, the right to sue one's landlord, to contract marriage freely, or to sell one's possessions without constraints," Giardina writes

 $^{^7}$ A sesterce was a unit of account based upon a quarter of a denarius. It was used for tax and budgetary purposes only.

(2007, pp. 749–50). Later emperors declared that bound peasants should behave as though they were, in fact, slaves.

The Roman law of *Colonatus* (serfdom) strictly prohibited landlords from converting their *coloni* into chattel slaves, not out of benevolence to the serfs, but rather to restrict the mobility of the tax base. Occasionally, serfs and lords violated their obligations. Peasants that illegally relocated were sometimes embraced by their new lords, who obtained tax-free labor until the next census. The legal code awkwardly proclaimed a penalty that such runaway peasants "must be chained and reduced to a servile condition, so that they will be compelled to carry out those tasks which they would perform as freemen" (Giardina 2007, p. 751). The Roman road to serfdom was paved with fiscal practices made over three centuries by expedient rulers.

Neither the bureaucracy nor the tax assessors had an interest in limiting the imperial budgets. The Roman bureaucracy set its own limits and the taxpayers did not know in advance what next year's burden would be. From AD 324 through AD 365, tax rates doubled (Jones 1966, p. 35), but there was never enough revenue for the Roman imperial state. The Diocletian caput system not only immobilized the labor force, it also had serious difficulties in applying standard assessments to lands with differential fertilities. The difficulties of economic calculation by distant administrators created a problem of adverse selection where it had not existed before.

In 337, the Emperor Constantine, who tied the peasants to the taxable estates, also assigned the uncultivatable public lands that nobody wanted to the nearest proprietors, to be included in their taxable assets.⁸ These unchosen obligations were attached to both small and large landholders and thus imposed a larger burden on smaller holders, causing them to abandon their whole lands. In 371, Roman authorities prohibited passing only the good lands to their heirs. Administrators forced cultivation and investments in submarginal lands and imposed heavy penalties (including death and confiscation) upon owners who either destroyed crops to avoid excessive taxation or did not obtain the state-mandated maximum sustainable yields. In 392, the emperor revoked the church's right to offer asylum to debtors (traditionally granted to most criminals),

⁸ We may attribute the mismeasure of the productivity of land (assigning barren lots equal *caputs* as fertile ones) as another example of the problems of economic calculation under socialism.

forcing politically powerless small holders into serfdom (Bernardi 1970, pp. 55-56).

The larger well-connected landholders formed alliances with Roman officials to obtain tax relief. They appealed for reductions of their caputs. Both legal avoidance loopholes and illegal tax evasions became endemic. Some emperors adopted stricter tax enforcement, but landholders pleaded inability to pay. By the end of the fourth century, many large holders and senators fell into huge tax arrears. In 376, an emperor granted general tax forgiveness. Tax arrears and amnesty would be repeated in 434, 445, 450, and 458. Imperial promises to be harsher on late tax payments in future years followed (Bernardi 1970, pp. 56–62). By the end of the century, imperial taxing authority lost credibility.

VII. Serfdom: The End of the Road

After restricting labor mobility, the Roman economy did not find some stable static zero growth equilibrium. By the end of the third century, banking and financial intermediaries disappeared (Temin 2001, p. 149). The immobilization of the tax base had rendered longdistant investment infeasible. The uneven application of arbitrary tax assessments and the sheer waste of the unsustainable urban entitlement demands pushed the economy into disintegration. Population declined from 70 million to 50 million. The borders became less secure against opportunistic barbarians. In 410, Rome was sacked. Urban economist Arthur O'Sullivan (2012, p. 21) explains, "In the fourth and fifth centuries, attacks from Germanic tribes disrupted the Roman collection system. It appears that there was little interest outside of Rome in restoring 'trade' routes, so the losses from successive attacks were cumulative." Tax returns declined and Roman roads and infrastructures fell into disrepair. The contraction of the markets further reduced the extent of specialization as the Roman economy declined. By the sixth century, shipping had fallen by 75 percent from the time of Augustus. After a time, the central authority with its tax collections dissolved, too, but this left a power vacuum for invaders to fill.

Roman centralized control degenerated into what we today call "feudalism." Economists Richard Miller and Robert Sexton (2005, p. 26) describe what happened next: "After the fall of Rome, continuous invasions brought the European countryside into chaos. Out of this chaos emerged a system of a large number of visually selfsufficient microscopic societies, each formed around a manor." The feudal manor was a farm estate over which a lord and master ruled over the serfs. The once great empire suffered from degrowth⁹ resulting in small, but not so beautiful, insular fiefdoms governed by hereditary lords who no longer had to send tax receipts to the emperor and yet held complete control over their serfs in residence.

Ludwig von Mises (1947, pp.768–69) summed up Rome's fate this way: "The marvelous civilization of antiquity perished because it did not adjust its moral code and its legal system to the requirements of a market economy. A social order is doomed if the actions which its normal functioning requires are rejected by the standards of morality, and declared illegal by the laws of the country, and prosecuted by the courts and police. The Roman Empire crumbled to dust because it lacked a spirit of liberalism and free enterprise."

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⁹ Degrowth is a political, economic, and social movement based on ecological economics, anti-consumerist and anti-capitalist ideas. It is also considered an essential economic strategy responding to the limits-to-growth dilemma (see the Wikipedia entries on post-growth and on "The Path to Degrowth in Overdeveloped Countries"). The socialists of Hayek's time supported economic growth and were oblivious to their contradictions. But today, certain socialists have deliberately embraced both the socialist means and ruinous consequences on behalf of environmental aims.

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