

# Week 22: Silver and Social Change in Late Ming

## Section 1: Introduction

We're going to be talking today about the economy and society in the late Ming and, really, in the 16th century going on into the 17th. But let me begin with this story. And it's something that happened in 1542 in a harbor along the southeastern coast of China of Ming.

It was a confiscation. Three ships were confiscated for smuggling. And in their holds, they found 3,000 kilograms of silver. Now, they weren't taking the silver out of Ming. They were bringing the silver into Ming.

And on this simple event from 1542, I want to hang a much larger story. A story about the role of Ming in Maritime trade, the power of trade relative to government and government restriction, economic and social change, but also-- and very importantly-- the beginning of our world, the beginning of a world in which all the nations of the earth are connected by trade.

We think of the first of these issues-- the Maritime world. And if you look at this map, you'll see that the shipping routes connected China, Japan, and Korea but went further-- went South-- along the coast of Vietnam, down to Malaysia, across to the Philippines, to Indonesia, and eventually, of course, through the Malay Straits to India, to Africa, to the Arab world.

These ships were confiscated as smugglers. They were traders. Why were they smugglers? Well, because the Ming government had forbidden foreign trade. It forbid its merchants to go abroad in ships on the seas to trade, even though the Zheng He expeditions that had ended in the 1420s had showed the power of the Ming Navy to keep the peace and to defend the trade routes.

The sea traders were, by definition in Ming, smugglers. Now, smuggling works as long as the local authorities agree to let you smuggle and local elites agree to let you smuggle for a price. If the government confiscates your goods, then traders we're supposed to quit.

At least, from the government's perspective, confiscation would lead traders not to invest in trade anymore. That is not what happened. And as a result, traders began to defend themselves.

When government was opposing trade and traders were defending themselves, you can see one more step and they could become pirates. So traders are not all smugglers, and smugglers are not all pirates. But there were pirates. And we see issues of piracy in the 1350s and '60s. The Ming suppresses it to some extent.

It comes up again in the 1520s, '30s, and '40s. The raids start to occur every year. And pirates we're not just people who were traders. They were marauders.

They would invade towns on the shore. They would rape and pillage, kidnap people for ransom. They would establish bases on the islands off the coast.

Now, we've talked about these pirates as Japanese pirates because, originally, they were armed sea fares coming out of the various states in Japan, which was highly decentralized, attacking Korea, moving along the coast, then down to China. But by the 1530s, '40s, and '50s, the pirates along the Chinese coast are not Japanese pirates so much. They are, in fact, Chinese pirates.

## Section 2: Why Silver?

Now let's go back to our story. The boats were carrying 3,000 kilograms of silver from Japan. Now how much was that silver worth? Well, Chinese, at the time, didn't measure in tons. They measured silver in what are called liang or taels in English.

And one tael-- it might also be called a Chinese ounce-- is about 1 and 1/3 ounces of silver, 38 grams of silver. So 3,000 kilograms was worth 80,000 taels. And how much was that worth? How do we understand the value of 80,000 taels or 3,000 kilograms of silver?

Well, if you wanted to earn 3,000 kilograms of silver in one year through a very safe investment, that is by owning land and renting it to farmers, which would give you around a 10% return on your investment. You would need 40,000 acres at prevailing rents in the mid 16th century. 40,000 acres. 16,000 hectares.

How much is 40,000 acres? Too large a number to make sense out of. Well, it's 63 square miles. A square, 8 miles to the side. That's around 40,000 acres. No one owned that much land. No individual. No private person owned that much land.

Now, it's coming from Japan. So what do the Chinese have that Japanese want-- that Japanese will pay in silver for? Well, the Japanese want Chinese manufactures. Chinese silk coming from the Southeast fetches two to three times the price in Japan.

Chinese cotton thread fetches twice the price. Chinese ceramics-- porcelains-- twice the price in Japan. And what do the Chinese want? They want silver. Japan had opened new silver mines on the Western coast. And they were very productive at a moment when China had seemingly run out of copper and had very little production of silver.

What's unexpected, however, is that Chinese merchants were getting that silver not only by selling manufactures but also by buying it with copper coins. In fact, there are great cords of copper coins in Japan. So this is a kind of a puzzle. Why were the Chinese so interested in silver?

Well, one answer would seem to be because it was cheaper in Japan than in China. So if you bought silver in Japan and took it back to China where silver was in demand you'd be making money just through the arbitrage. But there's more to the story than that.

So let me turn you over to some people now who can talk about the relationship between paper money, copper coin, and silver, and how things stood in mid 16th century when the ships were confiscated in the port on the Southeast.

## Ming Money System

For most of the Ming Dynasty, the government had little control over the money supply. It was functionally a bimetallic system - a system of exchange where value was set in two metals - copper coins and unminted silver. But the state had relatively little control over the value of either metal: while it minted some new coins, most of the copper cash in circulation was left over from the first few decades of rule or from the Song Dynasty; and as we have seen, most of the silver came from overseas.

This was not the case at the start of the Dynasty. The Ming founder, like his predecessors in the Song and Yuan Dynasties, tried to exert firm control over the money supply. He outlawed the use of unminted metals as currency, and issued large amounts of copper and paper money. As in the Song, the paper money was a fiat currency - it could not be directly exchanged for precious metals, but was instead backed by the power of the state. As long as people respected the state's mandate, and the state was responsible in issuing the currency and accepting it for taxes, the paper money retained its value.

But if the supply of paper money is not limited by the availability of copper or silver, the government can easily cause inflation by overprinting. Governments can be tempted to literally “print money” to pay for things. This is precisely what happened in the early Ming. First, the Hongwu emperor printed large amounts of paper bills to finance public works, a necessary measure given the destruction that had taken place during the late Yuan civil wars.. By the end of his reign, the paper money was being exchanged at 1/3 of its face value. Under the Yongle emperor, this tendency accelerated, as the government printed money to pay for repairs to the grand canal, moving the capital to Beijing, and Zheng He’s great fleets. By the end of his reign, paper money floated at less than 1/10th of its face value.

Inflation hurt the people in two ways:

First, it functioned as an extra tax. The government frequently paid for things in low-value paper bills, and demanded payment in goods or copper cash that were far more valuable than the face value of the inflated paper money.

Second, it caused uncertainty. Storing money or trading with paper became a risk, because the market value of the paper money might decrease if the government printed more. People preferred to store and trade with copper coins, whose value was ensured by the value of the copper itself. This led to hoarding of copper, which drove its value even higher. Copper was also impractical for high value or long-distance trade because its value was low for its weight. Until the advent of 20th century machinery, coins produced by casting were impossible to strictly control for weight.

I should add – Spanish coins do make it to Ming at the very end of the dynasty.

In the long-term, there were two main outcomes to the inflation of the paper money supply. First, there was a long depression for most of the 15th century, as trade was suppressed both by policy and by lack of sufficient money for exchange. Second, merchants turned to silver for trade. By the mid-to-late 15th century, the government changed its policy to reflect these practicalities - trade in silver was allowed, and taxes were calculated in both copper cash and by weight of silver.

As the Ming economy recovered from the 15th century recession, there was substantial demand for silver to enable long-distance trade. This was the situation heading into the 16th century, when Japanese and later New World silver poured into the Ming economy to meet the demand for currency. By this point, the government had largely given up on trying to control the money supply, and turned its attention to other types of policies in an attempt to control the economy.

The Single Whip:

The Ming tax system had two primary components - the land tax and the service levy, also known as *corvée*.

The land tax was collected “in-kind” - in grain and cloth. Each household was assessed a tax based on the amount and quality of land they owned. The specific type of tax depended on the region and type of land - in some places it might be assessed in wheat, in others rice, and in some places both.

The service levy was also collected “in-kind” - each household owed a number of days of labor of a certain type. This labor depended in part on the capabilities of the household members as well as the location. Literate men might have scribal duty, while others carted goods around or served as door guards. Households registered as craftsmen had to produce goods - like shoes or ink - for the local government, and

in some cases they had to travel to the capital for service there. Near major public works like the Grand Canal, the service levy could be quite severe.

To assess these taxes, the government-conducted surveys of landholding and population - sometimes called "cadastral surveys." It recorded the boundaries and quality of land held in books known as "fish-scale registers" (or *yulin ce* in Chinese) because their diagrams of land plots looked like the scales on a fish. Population was recorded in "yellow registers" (or *huang ce* in Chinese) named for the color of their bindings.

Under most circumstances, officials and the families of officials were exempt from both forms of taxation.

This was designed to create self-contained communities, wherein the county government, military bases and public works projects could all be supplied locally. This was based in the intent of the Ming Founder to ground people in communities, but also on the depression in the early Ming market.

By the 16th century, three major trends were beginning to cause problems for the tax system. First, the expansion of the market made it more efficient to pay for goods and labor in cash, rather than requisition them in kind. Second, the government was not consistent at making the cadastral surveys, so the tax quotas no longer reflected actual landholdings or population. Finally, official families used their tax exemption to accumulate large landholdings. They did this by taking on other farmers as tenants - controlling their land in name, but in practice allowing those farmers to pay a small rent to the official's family rather than paying tax to the state.

Starting in the southeast in the mid-sixteenth century, local officials began to come up with a series of reforms to correct the issues with the early Ming tax system. These reforms allowed some taxes - in some cases the land tax, in others the service levy - to be paid in cash rather than in kind. Local government offices would then use this money to pay for needed goods and services on the market instead of requisitioning them directly. This allowed greater specialization among the population - some households could work year-round as clerks or making shoes - paid for by the rest of the locality. In 1581, the reform was made national by Grand Secretary Zhang Juzheng. He also ordered another round of cadastral surveys to ensure that the tax burden more accurately reflected actual population and landholdings, and to fight the dominance of official families.

The reforms were highly controversial and faced vehement opposition. Ultimately, many tax payments were monetized across the empire - this merely systematized a set of reforms that had already been underway, and closely reflected the economic realities of mid-Ming society. But the reforms did not change the vast and overlapping bureaucracy that had grown up around the self-sufficient ideals of the early Ming. Furthermore, the new land surveys remained incomplete, and the reforms largely failed to curb the power of official families.

## **Section 3: The Portuguese**

The flow of silver was increasing in the 16th century thanks to an unlikely group, I guess we'd say, the Portuguese. The Portuguese had arrived in East Asian waters in 1513. By 1542, they had gained permission to trade at Macau, near present day Hong Kong.

They soon made a discovery. Rather than buying Chinese goods and shipping it back to Europe, they could make much more money traveling back and forth between China and Japan, carrying Chinese goods to Japan and Japanese silver to China.

By the early 17th century, 50 tons of silver, annually, were flowing from Japan to Ming on Portuguese, Chinese, Japanese, and Dutch bottoms. Now, 50 tons of silver-- we have a quick question for you. How much is that in taels? How much is that in Chinese silver units, the liang or the tael?

## **Section 4: The Spanish**

50 tons of silver is 1.25 million taels, as you've seen. By the way, it's a conservative estimate to say that 50 tons of silver were coming in annually from Japan. It may have been more. But it wasn't only from Japan. In 1571, the Spanish arrive in Manila, in the Philippines. And with them, they bring silver from the fabulously rich mines of Western Mexico, and Peru.

And they send ships annually to Acapulco Galleon, with American silver, to Manila. And the Chinese merchants flocked to Manila, selling their goods to the Spanish. And the Spanish want to bring silver to Manila, because the Chinese are so anxious to get silver that they will pay twice the price that Europeans will pay. What do the Spanish want? Not copper coin, in this case, but almost everything else.

## **Section 5: Globalization**

By 1600, the Spanish in Manila were sending around 40 tons of silver annually to China via Chinese traders. So by 1630, when the trade was at its height, there must have been around 100 tons of silver coming into Ming annually from Manila and from Japan, rents worth 1.3 million acres of land, 2.6 million liang or taels, ounces of silver. Remember, too, that silver circulated. Some people no doubt hoarded it, some of it must have been used for jewelry. But it also was part of the money supply and was circulating and thus it accumulated. The Ming economy was growing.

Those three ships that were confiscated in the harbor were an early sign of an emerging world economy. Europe and China were now connected-- no longer by the land bridge to central Asia, a hard and expensive journey-- but now by the sea. And now by trade with the Americas and American production. China had goods to sell to the Japanese and Europeans. The best quality, the lowest price. Textiles, ceramics, furniture, all manner of handicrafts, porcelains, and soon tea.

Tea was already well established as the Chinese national drink. But it really wasn't until the 17th, 18th century that it was established as national drink of England. And the English had to pay for it in silver. So much silver at that point was going into China from England. English treasury was running out of silver. And so they started to put a tax on tea. And that tax on tea came to Massachusetts in the 1770s. And we had as a result, here-- not far from where we're speaking now-- the Boston tea party. So we see the American revolution, in fact, has links to China and international trade as well.

Well, back to our story. China got more than just silver from the new world. Like Europe, it adopted new world crops. And those new world crops allowed the farming of marginal lands and supported a boom in the Chinese population. The sweet potato, corn, the peanut, the pumpkin, all of these are new world crops. And that one spice-- or not so much a spice but a vegetable-- which we so much associate with Chinese food, or hot Chinese food, Sichuan food, the chili pepper. That's also from the New World. Before the late 16th century, no one in China ate peppers, ate hot food.

## **Section 6: Commercialization**

Let's talk, now, about silver and the late Ming economy. How did the influx of silver affect the Ming economy and Ming society? Well, with foreign markets and more manufacture, there was more domestic wealth, more domestic consumers. And the domestic market flourished as well.

This had profound effects on the southeastern coastal region, and all those areas that were tied to trade. There was a great wave of commercialization. But commercialization, interestingly, without massive urbanization. The majority of the Chinese population was rural. And it remained so. They did not move to the mill towns or the cities.

What happened instead was that rural labor, family labor, household labor became more valuable because the household could produce things for the market. It didn't mean that every household produced everything. Rather, we see the emergence of what's sometimes called a Putting Out system.

It's where people who were good at raising mulberry trees, which provides the leaves that the silk worms eat, would grow leaves, sell them to somebody or perhaps use them themselves for their own silk worms, or sell them to somebody who raised silk worms, who might sell the cocoons from which the thread comes to people who would turn the many strands of silk into threads, who would sell it to other merchants who would sell it to weavers, who would then create cloth, which they would sell to other merchants who would sell them to exporters, and so on.

And this kind of putting out system allowed families to remain on the farm, so to speak. But it was made possible by something that was unique in the southeast, which was an elaborate system of water transport running through exactly the area where so much of the silk, and many of the handicrafts, were being produced. Water transport in this area, which you could travel from village to village, city to city through inland rivers and canals, water transport in this area probably is 1/10 of the cost of land transport in the north.

Now the market's expanded. And as markets expanded, farmers began to see that they actually might make a better living growing things for the market, what we would call cash crops. Suppose you are a farmer that had learned about tobacco.

Tobacco, from the new world, something people in Europe began to smoke, something that people in China began to smoke. But tobacco grows best on land you would use for rice.

So if you're growing tobacco on your rice paddy land, where are you going to get the rice? Other regions of China, the middle Yangzi, for example, have to export their rice downriver to you. New markets for grain, that's the middle Yangzi starts to benefit as well.

Well, with people, the more money to spend, the more they can buy. Domestic consumers say, well, why should I use stoneware, or earthenware, when I could buy porcelain? Why not build a better house? I'd like to have a nice garden. And in fact, this is exactly the period where we see professional landscape designers, and the first books about landscape design, appearing.

And if you have money left over, you could invest it. The returns on investment for foreign trade ran about 200%. But the risk is very high. Your ship might not return.

Long distance domestic trade, 50% to 100%. Money lending, 20% to 40%. Land, the most conservative and the most honorable investment of all. You could buy land, and rent it out, and not be considered a merchant, after all. Land only returned 10%.

But it was such a good, safe, conservative, honorable investment that money floods into the land market. People want to own land. And land becomes too expensive for the farmers. And when land is too expensive for the farmers to own, they become tenants on the lands of absentee landlords.

Their standard of living still appears to be going up. Everyone is getting wealthier. And tenancy in China is long term. The landlord cannot, in fact, kick the tenant off the land.

There's at some point here, it's not clear that it happens just yet, but something called the 3 lords of the field system. Interesting system where somebody owns the land, let's say the subsoil rights. He rents it to somebody who owns the topsoil rights. Who rents it to somebody who farms the land.

So you'd have three owners at once, which also makes it very difficult to collect taxes. which is, perhaps, part of the point. Let's look at how these developments affected new wealth and social change. Let's look at how new wealth affected social change.

## **Section 7: Social Change**

### **1. Social Changes: Merchants**

I want to turn our attention now to the way in which this new wealth started to have consequences for society. We can talk about this in terms of three groups-- first the merchants, second the local literati, and third the farmers. Well, it's very clear that this is a great era for merchants. By the end of the 16th century, the government had given up on its attempts to restrict merchant trade and travel.

And in fact, what had happened was that the money supply was now in the hands of private merchants, rather than the government. The government continued to mint copper coin. Paper money was no longer circulating. But it was the importation of silver that kept the Ming economy humming.

Merchants discovered that they could enjoy their wealth, and use it not only to gain access to government officials and to buy political influence, but also to become patrons of culture. In other words, wealth was now allowing the merchants to rival the literati for status. Wealth was beginning, you might say, to rival education.

And yet it's true that the merchants themselves still valued education. But now they found that they could buy low level degrees for their sons. Literati, or people who passed the examinations were officially not allowed to be merchants. Didn't mean their family couldn't invest and trade, however.

There's a wonderful novel from this period, which is all about merchants. It's called *The Plum Flowers in a Golden Vase*, sometimes translated as "*The Golden Lotus*." It's actually the Chinese first great pornographic novel. And it's about the corrupt and corrupting Ximen Qing and his concubines.

### **2. Social Changes: Literati**

Now recall that, in early Ming, the government had set about to secure social stability by trying to create institutions, or demanding, that local society institute a series of institutions that would create fairly self-sufficient and self-supervising villages that would pay their taxes, would not commit crimes, would be relatively poor, but stable and secure. And in order to make these work, local wealthy families, literati families, were expected to play leading roles in these local institutions.

But with new wealth, well-to-do people see that there are other more interesting opportunities. They begin to move to the towns and the cities, become absentee landlords. They begin to, in effect, to withdraw from their support from local institutions. And those local state-mandated institutions start to collapse, the village tithing system, village communal activities and worship, and so on. The better off, the better educated seek their profits elsewhere.

The Ming tax system, the Ming institutional system, had been set up for an agricultural society, not a commercializing one. This is not to say that the Literati lost all concern with local society. Some began to

think of new institutions, voluntary institutions that they would supervise, that they would fund with their own wealth, or sometimes local government wealth, if it had it, that would try to do something for local welfare. But this is a topic we'll address in a later part of the sequence.

One of the consequences of new wealth was the literati, of course, defensiveness, but also a general spread of education. With more money, people could purchase not only examination degrees, but they could send their sons to school, and daughters as well. As money supply increased, the number of literati continued to grow. And by one estimate, by the end of the Ming Dynasty in 1644, there may have been as many as 800,000 people, men, with local student status, official local student status.

## **Section 8: Political Changes**

Let's look now at how the Ming Court, the state, the government responded to this new situation.

These changes in society and economy I've been talking about took place despite the state, not because of it. Yet government could not remain on the sidelines forever. The Ming tax system simply made no sense in a commercial economy. But the tax system was not set up to gain cash revenues. Local governments, which had to collect goods, and pay their salaries of their officials in cloth and in grain, were going broke. They needed more income. They began to try to put surcharges on taxes, rather than raising taxes formerly, increasing the number of surcharges.

But as silver supply increased local governments began to see ways in which they could get silver too. And in fact a collection of policies begins to emerge administered variously in various regions, not in a nationally organized way. The mid 16th century, called the Single Whip, the major tax reform that aimed to secure silver supply for the government.

## **Section 9: Conclusion**

There were disadvantages, however, to this reliance on silver. The government and economy becomes more dependent on the global silver market. And for those regions that were not well tied into trade networks-- that were not integrated into trade networks-- that weren't getting silver. In those regions, silver cost more.

The farmer still had to pay taxes on silver. And for that, he had to sell goods. He might sell goods in copper coin, but that copper coin had to be converted to silver to pay his tax. And when silver became too expensive, the farming household would fall into arrears. And when the farming household fell into arrears, local government did not have adequate income.

And when local government did not have adequate income, it started to dismiss its personnel, fire people, it's clerks. And along the northern border, along the garrisons defending the northern border, local governments found they no longer had the income necessary. And they began to let the soldiers go, demobilize the soldiers and clerks. And soon enough, those clerks, and soldiers, and other destitute people began to form rebel groups.

In the 1620s, beginning in the northwest, Ming started to be swept by rebellion. In order to put down the rebellions, the courts needed to get money. The court needed to get money. And so, it sent eunuchs to impose new taxes on wealthy areas. They went down to Suzhou, for example, in the southeast, a center of silk production. And began to put a tax on all the looms in the city, and weavers revolted.

And when weavers revolted, riots broke out in other cities as well. And there were fires in some of the major cities. Remember, these are cities crowded, built with wooden structures, easy to spread epidemics,



easy to spread fires. It's at precisely this moment, in around 1630, that Japan closes its doors to European traders-- except the Dutch.

So the Portuguese, who played such an important role in bringing Japanese silver to China, no longer are bringing silver. Chinese boats, Korean boats still go to Japan, but not the Portuguese. And in 1634, 1636, the Spanish reduce the amount of silver going to Manila. The government, desperate for income, starts to debase the coinage. That is, it makes the copper coins thinner, they're worth less. That makes silver even more expensive.

There are more problems, as well. In these decades, there's poor leadership at court, an Emperor who is sometimes weak and petulant, and refuses to do his work. Factionalism among officials, struggles with the eunuchs, and eunuch dictators that emerge. And outside of Ming, there are also new, rising powers-- namely in the northeast. The former Jurchens, now to be known as the Manchus, at the northern border.

And just when a rebellion-- the rebellion of Li Zicheng, starts to sweep through the northeast, attacking the capital, pillaging the homes of the wealthy. The Manchus push at the pass, and the Chinese general at the pass decides to let them through. That the disciplined armies of the Manchus will be better than the marauding rebel armies of Li Zicheng. And this enables the Qing-- the Manchu-Qing conquest of Ming.

All that's true, and we'll come to it soon. But before we do, I want to tell you something else about the late Ming, and the quite extraordinary cultural vitality that silver made possible. And not only that cultural vitality domestically, but also the way in which Ming intellectual culture brought in new ideas from Europe, through the Jesuit, and other missionaries. And how Ming ideas began to travel abroad. OK.