TulipoMania Revisited

by

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Semper Augustus

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Outline

Thesis: The belief that the Dutch passion for tulips in the early seventeenth century historically known as *tulipomania* was the result of nothing but *irrational exuberance* has been part of both popular and financial lore for almost four hundred years and needs to be debunked.

I. **The Established Story: Dutchmen Gone Mad**. The exorbitant prices paid for tulips and the subsequent crash cannot be explained by anything other than irrational exuberance.
   a. The history of the tulip is well known.
   b. The price history has been well established.

II. **An Overblown Crisis?** The scope and importance of tulipomania has been exaggerated and is not as significant as recorded by history.
   a. Only a small segment of the population was involved in the tulip trade.
   b. The tulipomania did not reach down to the lowest classes of the Dutch society.
   c. No significant bankruptcies resulted from the crash.
   d. There was no significant effect on the economy.
   e. Tulip prices have been exaggerated.
   f. The resulting crisis was more of a crisis of confidence than a financial crisis.

III. **Tulip Mania Understood**. The story behind tulipomania is not just irrational exuberance but can be understood within the various contexts in which it occurred.
   a. The significance of the tulip's introduction to Europe has never been understood.

b. The wealth pouring into Europe from the Americas and East Indies has not been taken into consideration.
c. The actions of the tulip speculators when the price of tulips dipped after a long and steady rise were not thoroughly thought through.
d. The nature of the Dutch banking system has not been taken into consideration.

Conclusion: Despite some missing and questionable historical information, the rise of tulip prices in general in the early seventeenth century and the final rollercoaster like rise and fall of tulip prices in late 1636 and early 1637 makes inevitable sense when viewed as part of other events that were occurring in Europe, the world and the Netherlands.

Today we are painfully familiar with the current housing bubble and the dot-com bubble of the '90s. But, the first financial bubble in history occurred almost four hundred years ago in the Netherlands, not over houses or stocks, but the ordinary garden tulip. Despite the fact that the history of the tulip and the price history in the Netherlands has been well established, new research shows that there was some rhyme and reason to the run-up and subsequent crash of the prices paid for tulips in the early seventeenth century and not just Dutchmen behaving badly.

The Established Story: Dutchmen Gone Mad

The basic story of tulipomania recorded by history first comes down to us from Charles Mackay's 1843 book, *Extraordinary Popular Delusions and the Madness of Crowds*. In *Delusions*, Mackay tells us tulips first arrived in Europe in 1559 from Constantinople (89). The new flower grew in popularity until "it was deemed a proof of bad taste in any man of fortune to be without a collection of them" (Mackay 89). By 1634, the rage to possess tulip bulbs became so great that ordinary citizens began ignoring their businesses to engage in the tulip trade (Mackay 90). By 1635, a single bulb of the most sought after tulip variety, Semper Augustus [Latin for "ever the exalted"], was sold at auction for 5,500 florins (Mackay 91).

A conversion will show how much that is in today's dollars. A Dutch florin at the time contained one 37th of an ounce (0.027 ounces) of gold. With the price of gold currently hovering around $900 an ounce, the price of that single Semper Augustus tulip bulb in today's money would be 0.027 × 900 × 5,500 = $133,650!

The state of mind of many tulip aficionados of the time can be illustrated by an anecdotal story about the garden of Adriaen Pauw, the burgomaster [mayor] of Amsterdam, who did not have enough money to purchase as many tulips as he thought a man of his position should have:

> The secret of the garden…was a weird contrivance of wood and cunningly angled mirrors that stood in the middle of the tulip bed. It was a looking-glass cabinet, designed to multiply whatever stood before it. From a distance…Pauw's single tulip bed looked densely planted with hundreds of brilliant flowers. It was only when a curious or appreciative visitor approached more closely that he would realize it was just an optical illusion. The mirrors of the wooden cabinet had turned the few dozen tulips in Pauw's collection into spectacular profusion (Dash 79).

Pauw's cabinet would have worked similar to the acres-of-corn illusion often seen in booths at county fairs. A single ear of corn is placed within a wooden box about the size of a shoebox. The top is open and the four inside surfaces are mirrored. Gazing into the box from the top, the single ear of corn is reflected infinitely into the distance. The box appears to be an opening into another dimension of unlimited abundance.

In the autumn of 1635, tulip trading entered a new phase. Speculators began making deals with growers to purchase tulips over the winter while the bulbs were still in the ground (Dash 114). With the ever increasing value of tulips, the speculators were gambling that by spring when the bulbs were lifted from the ground, they could be resold to connoisseurs for more than they had agreed to pay the growers. Why would growers agree to sell their tulip bulbs in advance when they might get more for them in spring? With a firm contract in hand for their bulbs, the growers thought that they could now rest easy for the rest of the winter and not worry whether or not buyers would be available in the spring. For the growers, it was the financial equivalent of *a bird in the hand is worth two in the bush*. The growers believed they were trading away the risk of finding buyers to the speculators.

But, speculators will be speculators. By 1636, speculators were reselling the contracts themselves to other speculators creating a tulip futures market (Mackay 93). Individuals who had no desire to own actual tulips were becoming rich buying and selling tulip *contracts* (Mackay 94). This new

development came to be known as the *windhandel*, "trading in the wind" (Dash 115). The frenzy to trade tulips now rose to an even higher level:

> Nobles, citizens, farmers, mechanics, seamen, footman, maid-servants, even chimney-sweeps and old clotheswomen, dabbled in tulips. People of all grades converted their property into cash, and invested it in flowers (Mackay 94).

In January of 1637, the price of a single Semper Augustus bulb rose from the previous high of 5,500 guilders [florins] to an unbelievable 10,000 guilders ($243,000 in today's money) (Dash 108).

Prices spiraled ever higher in the windhandel until February 1637 when "at last…the more prudent began to see that this folly could not last forever" (Mackay 95). Because, by spring, all contracts must be sold at reasonable values to connoisseurs who actually wished to take delivery of the bulbs and plant them in their gardens "it was seen that somebody must lose fearfully in the end and as this conviction spread, prices fell and never rose again" (Mackay 95):

> A tulip that had been worth 5,000 guilders [florins] before the crash was sold later for only 50 guilders. In May [1637] a bed of tulips that would have fetched 600 to 1,000 guilders in January [1637] is said to have changed hands for 6 guilders, and a selection of bulbs worth about 400 guilders during the boom was sold for a mere 22 guilders (Dash 165).

When the bulbs were ready for delivery in the spring of 1637, most of those left holding the contracts did not have the funds to discharge their agreements:

> Many who, for a brief season, had emerged from humbler walks of life, were cast back into their original obscurity. Substantial merchants were reduced almost to beggary, and many a representative of a noble line saw the fortunes of his house ruined beyond redemption (Mackay 95).

With the realization that the majority of the contracts would or could not be honored, growers meeting in Amsterdam agreed that contract holders could be released from their obligations by paying 10 percent to the grower (Mackay 96). Eventually, the Court of Holland at The Hague took up the matter and recommended that all settlements be suspended while an investigation of the mania was undertaken (Dash 188). And, that was it. No investigations ever took place and the Court never took up the matter again (Mackay 96). A few honest traders settled their differences out of court but for the majority the suspension of their settlements became permanent (Dash 188).

> To find a remedy was beyond the power of government. Those unlucky enough to have had stores of tulips on hand…were left to bear their ruin as philosophically as they could; those who had made profits were allowed to keep them; but the commerce of the country suffered a severe shock which it was many years ere it recovered (Mackay 97).

It is clear that Mackay thinks the only explanation for this episode in history is madness. In his preface to the 1852 edition of *Delusions* he writes:

> We find that whole communities suddenly fix their minds upon one object, and go mad in its pursuit; that millions of people become simultaneously impressed with one delusion, and run after it, till their attention is caught by some new folly more captivating than the first (ix).

An Overblown Crisis?

The main problem with this explanation is that until recently there has been only one significant reporter of tulipomania: Charles Mackay. Subsequent writers have either accepted his accounting as a fact of history without reference or use *Delusions* as their only source. For example, when renowned economist John Kenneth Galbraith recounts this story in his 1990 book, *A Short History of Financial Euphoria*, his only source is Charles Mackay.

In a June 2007 article in *History Today* titled "Flower Power Tulipmania: An Overblown Crisis?" Anne Goldgar takes exception to many of Mackay's statements.

Mackay's story gives the impression that all of Dutch society was embroiled in the tulip trade. However, Goldgar's research of three major cities shows that only hundreds out of over a hundred thousand were buying and selling tulips:

> I have located around 285 people in Haarlem…who bought and sold tulips out of a population of 42,000. In Amsterdam (at the time with a population of about 120,000), I found sixty buyers and sellers…. In Enkhuizen, with around 22,000 people, I have found twenty-five involved (par. 13).

Goldgar further disputes Mackay's claim that the lower classes of Dutch society were involved in the windhandel:

> Yet once again, when we turn to the archival evidence, we face a surprise. Weavers and other lower-level artisans barely feature in the documents; most come from the solid middle classes of merchants and master craftsmen (par. 15).

Even though Goldgar confides that "bankruptcy records for this period are patchy" she writes "it is difficult to find any bankrupts at all associated with tulipmania" (par. 16). Additionally, she has found that when those involved in the tulip trade do come up in bankruptcy records they are usually bidding for the property of others (par. 16).

Goldgar can find no evidence of a severe shock to commerce that took many years to recover. "The Dutch economy" she writes "continued to grow until the mid-seventeenth century in nearly every area…" (par. 17). Remembering that the Court of Holland effectively canceled all tulip contracts that were struck during the mania, she concludes "…the only people who lost

money would have been those who actually had bulbs in their possession. And many of these could afford to take the loss" (par. 17).

Goldgar's research also shows that the prices of most tulips were not really that insane (par. 18). As for those exceptionally high prices paid for tulips such as Semper Augustus, she writes "Of those…who spent more than 400 florins…nearly all were wealthy merchants" (par 18).

Finally, Goldgar wonders why writers like Mackay would have painted the story of tulipomania as such a crisis if so few people were involved and fewer still were financially harmed by the episode. First she notes that

> …most discussions of the tulip trade is…a specific seventeenth century view—and a moralizing one—of the dangers of luxury in the wrong hands and consisting of the wrong things (par. 20).

Why might telling a moralizing tale be important to writers like Mackay? Goldgar thinks that the real crisis was social not financial:

> Even if people…could afford to lose the money they had hoped to gain, it might take them much longer to come to terms with the trust they had seen broken (par. 24).

In writing about the aftermath of the crash, Mackay seems to bear her out in this very fall-from-grace sounding passage:

> The cry of distress resounded every where, and each man accused his neighbor. The few who had contrived to enrich themselves hid their wealth from the knowledge of their fellow-citizens and invested it in the English or other funds (95).

Any society wishing to grow into the future must have the trust of its participants. In *Delusions*, Mackay is delivering a sermon—not writing history.

Tulip Mania Understood

Even after granting that the magnitude of tulipomania may have been exaggerated for the purpose of moralizing, one is still left wondering why the wealthy were willing to pay such high prices for tulips and one still wonders why the mania of 1636–1637 occurred at all.

In his 1999 book, *TulipoMania*, Mike Dash expands on the history of the tulip and demonstrates that the tulip must be viewed in the context of the sixteenth and seventeenth centuries—not the twentieth and twenty-first.

First, Dash explains that it was not just tulips that were imported from the Ottoman Empire to Europe but the whole idea of the garden as a work of art:

> The Turks' passion for flowers…were among the novelties that drew comment; even the cultivation of plants purely for their beauty seemed strange to visitors accustomed to thinking of them as things to eat or pound into primitive herbal medicines (26).

Next Dash points out that a new source of wealth was pouring into Europe:

> The time [by 1566] was now right for the tulip. With the discovery of silver mines in the Americas and trade routes to the Indies, there was more money in Europe than ever before, and the rich were looking for interesting ways to spend it (33).

Wealthy Europeans began to develop beautiful gardens and the stars of their gardens were tulips. There were a couple of reasons that tulips became such stars. Remember at this time in history there were no garden centers showing off the latest blooms developed by flower breeders. The brightly and intensely hued petals of tulips would have stood out in sharp contrast to ordinary European flowers:

> …it is impossible to comprehend the tulip mania without understanding just how different tulip cultivars were from every other flower known to horticulturists in the seventeenth century. The colors they exhibited were more intense and more concentrated than those of ordinary plants; mere red became bright scarlet and dull purple a bewitching shade of almost black (Dash 58).

For the wealthy, the tulip was the new luxury art. Now Dash explains how slow it is to propagate tulips:

> Growing [tulips] from seed is a chancy business; because plants grown from a single pinch of seed gathered from just one flower can exhibit considerable variation. It is impossible to know exactly what sort of tulip will emerge. Details such as color and the pattern of the flower can only be guessed at, which makes the process frustrating for anyone seeking consistency (56).

To make matters worse, "it takes six or seven years to produce a flowering bulb from seed…" (Dash 56).

The only way to propagate new tulips consistently is with small outgrowths that form on mature bulbs:

> Once a tulip grown from seed has matured and flowered, however, it can also reproduce itself by producing outgrowths known as *offsets* from its bulb. These are effectively clones of the mother bulb and will produce flowers that are identical to it. Offsets can be separated from the mother bulb by hand and, in another year or two, become bulbs capable of flowering themselves (Dash 56).

But, this process is just as slow or slower than propagation by seed:

> Most tulip bulbs will produce only two or three offsets a year and can do so for only a couple of years before the mother bulb becomes exhausted and dies. …it can take a decade for a new tulip to become available in any sort of numbers (Dash 57).

The slowness of propagation insured that the tulip would remain a luxury item for a long long time. It took until the end of the century before favorite tulip varieties started to become available in sufficient quantities to meet demand.

Just as it seemed that tulips were ready to fall out of their rarity status, some exciting new striped tulips started popping up in gardens in the Netherlands. There was a mystery associated with these striped tulips that made them even more enticing. Tulips that had been coming up for years as solid colored would suddenly come up one spring as striped (Dash 60)! This process was known as color *breaking* (Dash 60). No one could explain the breaking process or predicate which bulbs, if any, would be the next to break (Dash 60).

No two bulbs created the same striping pattern when they broke. Some broken varieties showed more intricate striping patterns than others and were more highly prized than cruder patterns. The striping on Semper Augustus was valued highest of all (Dash 80). Now a whole new round of propagation of these beautiful broken varieties took place.

In this context of slow production rates and increasingly new exciting varieties, we can understand that to wealthy Europeans, tulips—especially the broken varieties—were considered high end luxury goods. They were the big screen TVs of their day. Twenty years ago a large screen TV would have cost $20,000 but now they can be had for under a $1,000. A similar price reduction was just starting to happen with tulips when the runaway windhandel got underway.

And, that is the next question to answer. What caused the mania over the winter of 1636–1637? This is where two UCLA professors, Earl A. Thompson and Jonathan Treussard, enter the picture. In any bull market, there are up and down price fluctuations occurring within the general upward trend. Thompson and Treussard point out that tulips were trading during the

middle of the Thirty-Years War (5). A war is an expensive thing to undertake and this war was beginning to slurp up a lot of surplus wealth. In early October 1636, the Germans lost a decisive battle at Wittstock (Thompson 5). The German princes, in need of a fresh supply of cash, began digging up their tulip bulbs and selling them into the market (Thompson 5).

For the first time in history, the tulip market became very soft. Since this was not just a minor downward blip in an upwardly trending market, it was beginning to look like for the first time spring tulip prices would be lower than fall prices. Contract holders suddenly realized that they might not be able to resell their contracts by spring. Many contract holders, including many Dutch burgomasters, began to panic. These windhandel traders did not have the money to take delivery of the bulbs when spring rolled around.

In fall 1636, the burgomasters met with other traders to discuss the problem and began to float the idea that if prices did not rise by spring they would convert their *obligation*-to-buy contract into an *option*-to-buy with a 3½ percent grievance payment to growers (Thompson 6-7). In plain talk, they were simply going to default on their agreements. However, after the growers got over their initial shock at this turn of events, they suddenly agreed except they wanted a 10 percent buyout instead of 3½ (Thompson 7).

Why would the growers do this? The growers would have been aware of the soft market and that the contract holders would not be able to pay in the spring. It must have seemed like the best solution all the way around. The contractors would get out of their obligations for a fee of 3½ to 10 percent paid to the growers. The growers, then, could directly seek out tulip connoisseurs in the spring. But, an unintended consequence got in the way.

Poorer outsiders had gotten wind of the new arrangement and began flooding into the market "with the greatest influx of newcomers coming in December 1636 and January 1637" (Dash 123). To the newcomers it seemed like easy money. If prices didn't go up by spring, they could get out of the deal

for no more than 10 percent. With the risk now seemingly gone, prices were free to jump up 10 and sometimes 20 times what they had been in fall. Even older, solid color tulips now entered the windhandel to satisfy demand. Eventually, no new bulbs could be found and by 5 February 1637 prices could rise no higher. If prices can't go higher they must go down.

In their eagerness to get into the market, the newcomers didn't realize until too late what the established traders knew. By spring a genuine tulip customer must be found for the bulbs the contract represents. Even a small price increase in this soft market would doom a final sale to a tulip connoisseur. Furthermore, tulip connoisseurs were definitely not going to buy common place, solid color tulips.

But, is this it? Could just a change in the terms of the contracts create an illusion of easy money that would lure otherwise sensible people into driving up the market? Or, was something else going on that pushed people into taking the risk?

With all of this new wealth flowing into Europe from the Americas and with a lot of new wealth flowing into the Netherlands from the East Indies spice trade, one can't help but think of the "I" word, INFLATION.

There has been confusion about wealth and money ever since money was first created. Money is not wealth. Money is a token or coupon accepted in exchange for a service performed or a possession. The only value of money lies in the fact that these tokens or coupons can be re-swapped for real wealth—a real good or service. Money facilitates exchanges but problems occur when the supply of money varies with the supply of goods or services in the economy.

For prices in general to remain steady, the supply of money (or credit) in circulation must increase at the same rate the economy in general is growing.

Inflation is generated when money is increasing faster than the economy is growing. The economy becomes an overall sellers market. With more money available than there are goods and services to buy, sellers jack up prices. The

higher prices rebalance the increased supply of money with products available for purchase. An inflationary environment is like an old West boomtown. Prospectors are digging gold out of the hills faster than goods can be produced and services provided. Prices adjust upwards to balance out all of the gold flowing into the town with limited goods and services.

Deflation occurs when the supply of money in circulation increases slower than the economy is growing. The economy becomes an overall buyers market where cash is king. With more goods and services available for sale than there is money, sellers have to reduce prices to attract buyers to <u>their</u> product instead of someone else's. Prices decrease in order to rebalance the decreased supply of money with available products.

In the seventeenth century, money is gold coins, silver coins or paper representing gold or silver deposited in a bank. At the time, the Bank of Amsterdam had a standing policy to either coin for a nominal fee all gold and silver presented to it or issue paper money representing the deposit of the metal. Via Bank of Amsterdam, any quantity of gold or silver in any form could be converted into spendable cash on demand. Not surprisingly, this policy made Bank of Amsterdam the bank of choice for new wealth flowing into Europe (French 10).

Figure 1 of Doug French's article "The Dutch Monetary Environment during the Tulipmania" in the Spring 2006 edition of *The Quarterly Journal of Austrian Economics* shows that the amount of silver flowing into Europe in the early seventeenth century was at an all time high (12). Figure 2 shows that mint output of guilders in the Netherlands was also at an all time high during this period (French 12). "More specifically from January 31st 1636 to January 31st 1637—the height of the tulipmania—Bank of Amsterdam's deposits increased 42 percent" (French 10).

Historically, during the very best of times, economies are able to grow at a 4 to 5 percent rate. With the supply of money in the Netherlands in 1636

increasing at a rate of 42 percent, the stage was set for a raging inflation and a "boomtown" mentality.

However, is there any evidence that there really was a runaway inflation at this time? Yes there is and it comes from Charles Mackay himself:

> …money poured into Holland from all directions. The prices of the necessaries of life rose again by degrees: houses and lands, horses and carriages, and luxuries of every sort, rose in value with them, and for some months Holland seemed the very antechamber of Plutus [blind god of wealth who can't distinguish good from evil] (94).

French concludes:

> This acute increase in the supply of money served to foster an atmosphere that was ripe for speculation and malinvestment, which manifested itself in the intense trading of tulips (12).

Sewing all of the pieces together creates a scenario that could have caused tulipomania. Up until 1636, tulip prices are not excessive for what would be a luxury good being pursued by the wealthy. The 1636–1637 mania was set up by the fact that speculators were engaged in uncovered tulip futures trading—*uncovered* meaning they didn't necessarily have the money to discharge their contract should the price of tulips fail to rise. When the market went soft in the fall of 1636, buyers and sellers alike recognizing the disaster coming in the spring sought what seemed like a reasonable solution. If prices failed to rise by spring, contract holders could buy out of their deals for a small fee leaving the tulip growers free to seek new customers. The unforeseen consequence was that this cheap buy-out provision appeared to newcomers as a desperate way to save themselves from a runaway inflation that was destroying their livelihood.

Since inflation was not explained until the twentieth century and since no procedures were in place to verify that traders had the funds to cover their

deals, Tulipomania seems less like madness and more like the lack of a credit verification system and a poor understanding of market processes.

Works Cited

Dash, Mike. *TulipoMania*. New York: Crown Publishers, 1999.

French, Doug. "The Dutch Monetary Environment During Tulipmania." *The Quarterly Journal of Austrian Economics* 9.1 (2006): 3-14. 14 May 2008 <http://www.mises.org/journals/qjae/pdf/qjae9_1_1.pdf>.

Galbraith, John Kenneth. *A Short History of Financial Euphoria*. New York: Whittle Books, 1990.

Goldgar, Anne. "Flower Power Tulipmania: An Overblown Crisis?" *History Today* 57.6 (2007): 33-39. *EBSCO MegaFILE*. Hennepin Technical College. 14 May 2008 <http://web.ebscohost.com/ehost/detail?vid=4&hid=5&sid=b93b2693-3886-4463-af5b-41301d5b702c%40sessionmgr3>.

Mackay, Charles. *Extraordinary Popular Delusions and the Madness of Crowds*. Amherst, NY: Prometheus Books, 2001.

Thompson, Earl A., and Jonathan Treussard. "The Tulipmania: Fact or Artifact?" (2002): 1-21. 14 May 2008 <http://www.dklevine.com/archive/thompson-tulips.pdf>.