

JACKSONIAN MONETARY POLICY, SPECIE FLOWS, AND THE PANIC OF 1837

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Working Paper No. 00-W04R

January 2000
Revised June 2001

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Forthcoming, Journal of Economic History

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First Version: March 2000

Final Version: June 2001

Abstract

The Panic of 1837 stands among the most severe banking crises in U.S. history. It is thus not surprising that a number of hypotheses have over time emerged to disentangle its “true” causes from a host of domestic and international factors that came into play as the crisis approached. In this paper, I analyze unexplored information from the U.S. government documents and contemporary newspapers to take a fresh look at the role of domestic factors. These sources point to an explanation that places neither the official distribution of the federal surplus to the states in the Spring of 1837 nor an international shock at the center. Rather, a series of underappreciated interbank transfers of government balances ordered in the year leading up to the crisis combined with a policy-induced increase in the demand for coin in the Western states to drain the largest New York City banks of their specie reserves and render the panic inevitable.

Keywords: specie circular, deposit act, distribution of the surplus, public land speculation, suspension of payments

JEL categories: N11, N21

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The financial panic that gripped the U.S. economy in the Spring of 1837 was among the most severe in its history. In the five years that followed the nation's first general suspension of specie payments by banks, failures and loan losses reduced the book assets of the state chartered banks by 45 percent, and 194 of the 729 banks with charters in 1837 were forced to close their doors.¹ Prices of banking, railroad and industrial securities in the early stock markets plummeted.² And though the resumption of payments a year later led to a short-lived recovery in the second half of 1838, the specter of 1837 must have weighed heavily in the minds of the public as panic conditions returned in 1839 at the first sign of monetary pressure. Declines in real activity accompanied these losses of confidence. For example, growth in per capita investment fell from an average of 6.6 percent per year between 1831 and 1836 to -1.0 percent per year over the next five years, while average per capita output growth fell by 1.4 percent per year across the same five-year periods.³ Douglass C. North reports that real per capita imports reached only half of their 1836 level in each year from 1837 to 1843, while George Heberton Evans finds that non-financial business incorporations fell by more than 80 percent.⁴

Given the consequences of the 1837 panic and their magnification in 1839, it is not surprising that a number of hypotheses have emerged to explain the suspensions of May 1837. Each isolates a different domestic or international event as central among a host of shocks that buffeted the nation in

¹ Total bank assets are from *Historical Statistics* (series X581, p. 1020). Bank failures are from Joseph G. Martin, *Seventy-Three Years* (p. 31). The number of state chartered banks is from J. Van Fenstermaker, *Development* (p. 111).

² For example, Walter B. Smith and Arthur H. Cole, *Fluctuations* (p. 46), report that railroad stock prices fell by 63 percent between 1837 and 1843, and that banking and insurance stocks fell by 31.9 percent. Jeremy Atack and Peter L. Rousseau, *Business Activity* (p. 175), report a decline of 23 percent in their value-weighted index of industrial stock prices for Boston over this period.

³ Data on real output, real investment and population for 1832-43 and 1868-79 are from Thomas Senior Berry "Production and Population."

⁴ North, *Economic Growth*; and Evans, *Business Incorporations*.

the months leading up to the crisis. To this day, however, the panic remains imperfectly understood.

This paper organizes previously unexplored information from U.S. government documents and newspapers to take a fresh look at the panic. The analysis suggests that the official distribution of the federal surplus to the states in 1837 -- Richard H. Timberlake's explanation -- could not have involved enough specie movement to be an immediate determinant of the crisis.⁵ Further, an international shock -- Peter Temin's explanation -- could not alone have caused the suspensions.⁶ Rather, the banking system sustained two other disruptions in 1836 and early 1837 that turn out to be central. The first was a series of "supplemental" interbank transfers of public balances ordered by the Treasury under the Deposit Act of June 23, 1836 to prepare for the "official" distribution of \$28 million of the \$34 million federal surplus. The second was a heightened demand for specie in the West arising from the Jackson administration's "Specie Circular" of July 11, 1836, which ordered the use of specie for the purchase of public lands after August 15.

Operating in a tandem, these measures reduced the specie reserves of the deposit banks in New York City from \$7.2 million on September 1, 1836 to \$2.8 million by March 1, 1837 and a mere \$1.5 million by May 1. The drain left the banks vulnerable to specie calls from a faltering British economy that had become determined to settle its international balances. As the dollar-sterling exchange rate approached the export point in April of 1837, the prospect of such calls then combined with President Van Buren's highly-publicized refusal to repeal the Specie Circular to engender distrust in the value of bank notes. As news of New York's dwindling reserves reached the newspapers, declining land prices combined with pressure from abroad to launch a precautionary demand for coin in early May. Figure 1 shows the timing of key domestic events in the year leading

⁵ Timberlake, "Specie Circular."

⁶ Temin, *Jacksonian Economy*.

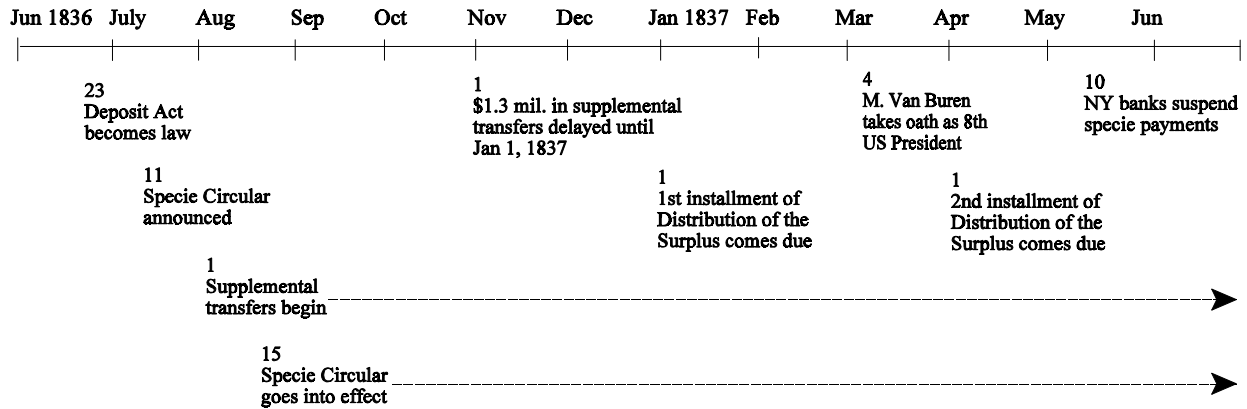


Figure 1– Timing of Domestic Events Leading to the Panic of 1837.

up to the panic. Indeed, the balance sheets of the deposit banks between July 1836 and August 1837 show how these policies combined to set the panic into motion. Since the Jackson administration acquiesced to the Deposit Act and initiated the Specie Circular as an executive order, this account calls into question claims that the nation’s seventh President was an innocent bystander to the crisis.

The paper begins with some background of the panic, a synopsis of other theories that have been advanced to explain it, and a brief overview of the banking system at that time. Next, I examine the interbank transfers that were executed in 1836 and early 1837, and relate their size and geographic pattern to changes in the specie reserves of the regional deposit banks. I then show that the Specie Circular, while generating new demand for coins in the West, had little effect on public land sales until the late Spring of 1837. After explaining how the internal specie drain set the stage for panic, I revisit international explanations of the crisis in an attempt to place them into an appropriate perspective.

BACKGROUND

The Panic of 1837 was a watershed event for the U.S. economy. Contemporary “hard money” advocates viewed it as a result of expanding paper money issues in an inadequately

regulated banking sector bloated by the government deposits that had been removed from the Second Bank of the United States three years earlier.⁷ Despite the resonance of such rhetoric, the traditional accounts of Reginald C. McGrane and Bray Hammond point to the Specie Circular, which directed federal receivers to accept only specie for public lands after August 15, 1836, as the primary cause.⁸ This monetary policy was designed to reduce the note issues of remote banks and to erect a barrier for speculators, who would have more difficulty raising specie for land purchases than the bank notes and “certificates of deposit” (known as “land office money” and often fraudulently obtained) that they had been using.

Public reaction to the Specie Circular can be characterized by initial confusion followed by concern about its potential to disrupt the money market.⁹ It was widely believed that the specie requirement would drain reserves from New York, Philadelphia, and New Orleans to the West and cause loan curtailments in those cities. There was also a (not entirely unfounded) belief that the Government by accepting specie for land would effectively “lock it up.” The initial drain aggravated existing monetary pressures late in the Summer of 1836, and by early September rates on short-term business paper in New York had risen to 24 percent from only 12 percent in late June. They

⁷ This sentiment is aptly expressed in a September 25, 1836 editorial from the *New York Herald*: “Fifty thousand dollars in the currency of a good bank, and ten thousand dollars in specie, will set going a dozen of these remote Western banks. After one has used it, it goes beyond the next hill or across the next river, the cashier swimming the stream on horseback, to start another bank. Their notes are signed, packed up in bundles of \$10,000 each, and sent into New York, to be circulated among the work people and the mechanics.”

⁸ McGrane, *Panic*; and Hammond, *Banks and Politics*. The Specie Circular offered an extension until December 15 for tracts of 320 acres or less that were purchased by “actual” settlers and “bona fide” state residents.

⁹ “The general impression is fast settling down to the belief that the Treasury Circular and the Distribution Law will so disturb the currency, exchanges, and the business of the country, as to cause an extensive pressure in a few months. The commercial interests of the American cities suffer every way. Western merchants are all up to the eyes in land speculations” (*New York Herald*, July 16, 1836).

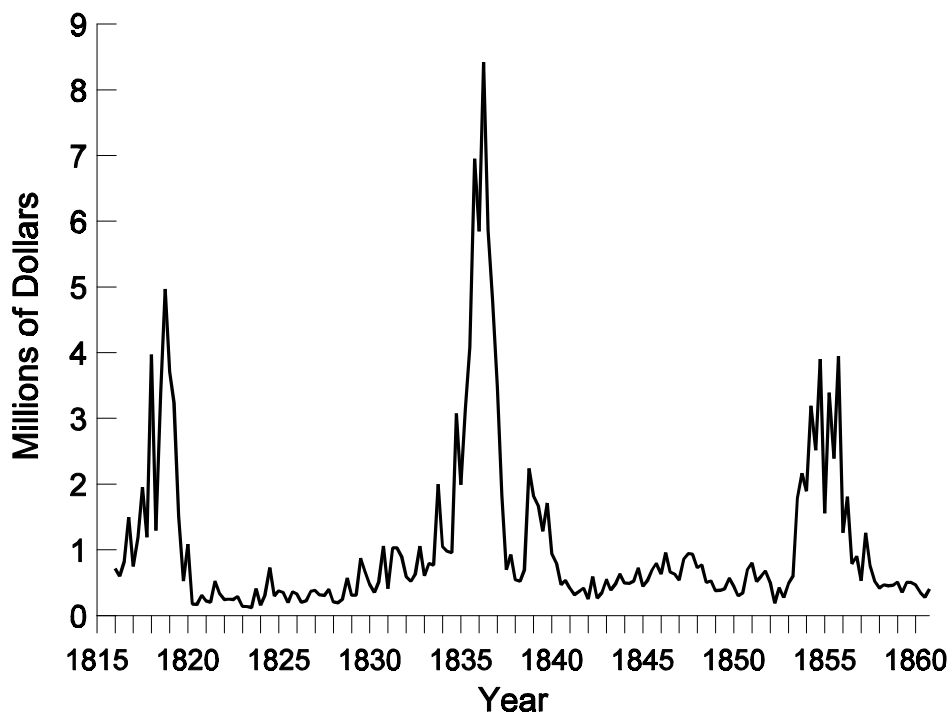


Figure 2— Receipts from Sales of Public Lands, Quarterly 1816-1860. Source: Smith and Cole, *Fluctuations*, Table 72.

remained more than 20 percent in each month (with the exception of December 1836) until the suspension.¹⁰

Figure 2 shows an acceleration in public land sales from 1834 to their historical peak in early 1836, and continued brisk sales throughout that year in spite of the Specie Circular. Sales even

¹⁰ Smith and Cole’s *Fluctuations* includes data on monthly short-term rates that begin in 1831 and exceed 10 percent for the first time in November of 1833. They characterize 1834 rates as “high and variable” and 1835 rates as “comparatively low.” Rates again reached 10 percent in December of 1835 and fluctuated between 12 and 18 percent throughout the Spring of 1836. Possible explanations for these “high” rates include inflation from increases in the specie stock and the accompanying bank note issues, and pressure arising from speculation in land, slaves, and railroad and canal stocks. These factors may have been pushing the U.S. economy towards a crisis before the Specie Circular was enacted, yet interest rates similar to those observed in the Spring of 1836 had persisted throughout 1834 without causing a panic. Accordingly, this account begins with events which subsequently pushed interest rates from high but not unprecedented levels to extraordinary ones.

reached \$3.48 million in the first quarter of 1837. The traditional account suggests that the flow of specie to the West was inadequate to support this pace, and that a break in land prices ushered in the panic.

My account emphasizes the Specie Circular as central, but differs from the traditional one by showing that the specie stock was large enough to support land sales for months after its enactment. Indeed, the westward drain from New York did not reach critical mass until the Spring of 1837. It was thus the *inability* of the Specie Circular to halt land speculation quickly that strained the reserves of the New York banks and contributed to a loss of confidence in their notes. A decline in land prices, for which there is consistent but only anecdotal evidence, would have further impaired financial institutions that supported land purchases (with eastern banks among them) but is not essential to my narrative.

Timberlake asserts that the Specie Circular had negligible effects.¹¹ He reasons that since public land sales were about \$25 million in 1836 and gross national product about \$1 billion, the fall in land sales in early 1837 was too small to lower aggregate demand, and that the diversion of funds from land purchases could have even increased demand. This, however, is not an appropriate comparison. If specie from New York was needed for Western land purchases it would require only a few million in sales to cut deeply into the reserves of that city. After dismissing the Specie Circular, Timberlake focuses on the “official” Distribution of the Surplus, which provided for the transfer of federal balances in excess of \$5 million to the states according to their relative populations in four equal quarterly installments starting on January 1, 1837. Some \$28 million was transferred in the three installments (January, April and July) that were realized. Most did not cross state lines. Some, however, did and especially out of New York. Using records of the Distribution,

¹¹ Timberlake, “Specie Circular,” p. 111.

Timberlake shows that New York's deposit banks transferred \$1.3 million across state lines in January and April of 1837, a sizeable portion of which was probably drawn in specie, and describes these transfers as a "jeweled-pivot" upon which the crisis turned.¹² How such small interstate transfers could have caused a panic was not addressed, and has since motivated economic historians to seek alternative explanations.

Temin, reluctant to accept the traditional account due to a lack of evidence that an economically important amount of specie actually flowed to the West, offers such an alternative.¹³ According to Temin, two increases in the Bank of England's discount rate in the Summer of 1836 and their instructions to the Liverpool branch to reject bills of exchange drawn on houses associated with American commerce in late August were the start of a deliberate and sustained effort to "recover" specie that had been presumed lost to the United States. These actions combined to reduce demand for the U.S. cotton crop of 1836-37 and force a drop in its price by the following Spring. This in turn depressed the market values of cotton-backed bills in the U.S. and produced defaults among cotton factors, a deterioration of bank assets, and finally panic.¹⁴ The argument requires a lag of at least eight months between the Bank's initial actions and the panic, and large real effects of a fall in the price of cotton that occurred late in the annual export cycle. Such fluctuations in cotton prices, however, were not uncommon by historical standards. There is also evidence that the bill rejections were an embarrassing blunder by the Bank of England, and that public alarm in that country had led to a quick reversal of the policy. By the Spring of 1837, the Bank was even taking extraordinary measures to support houses involved in the American trade. This is not to say that the international factors emphasized by Temin had no impact on U.S. developments. But the

¹² Timberlake, "Specie Circular," p. 112.

¹³ Temin, *Jacksonian Economy*, p. 123.

¹⁴ Temin, *Jacksonian Economy*, pp. 136-41.

breakdown of the U.S. banking system was already underway by the time that the Bank of England made its moves, as shown below.

The above accounts all neglect or readily dismiss the effects of the “supplemental” Treasury operations. Even Harry N. Scheiber, in making a descriptive case that these transfers disrupted the banking system in the Fall of 1836, does not quantify their possible effects with the available bank-level, state-level, and regional data.¹⁵ Interestingly, these data seem to hold the key to understanding how the transfers contributed to the drain of specie reserves from New York.

This specie drain was pivotal because the U.S. banking system was by this time firmly centered in New York. On August 1, 1836, for example, the \$5.8 million in specie held by the deposit (i.e., “pet”) banks of that city represented 36 percent of the \$16.3 million held by all deposit banks, 16 percent of the \$35.5 million held by all state-chartered banks, and nearly 90 percent of the specie held by state banks in New York. The \$5.8 million reserve base was more than ten times that of New Orleans, and was nearly triple the combined specie reserves of deposit banks in Alabama, Kentucky, Louisiana, Mississippi and Tennessee.¹⁶ Since specie was often required to settle international balances and New York was the nation’s commercial center, it is not surprising that coins accumulated there. Nor would the banks have hesitated to lend quantities commensurate with their ample reserves. The New York City banks also held 34.2 percent of the \$42.3 million that the federal government had deposited with the pet banks. This was due to New York’s position as the collection point for revenues from the government’s main source -- tariffs.

With the nation’s specie stock estimated at \$70.1 million in August of 1836, the above

¹⁵ Scheiber, “Pet Banks.”

¹⁶ Data on the deposit banks for September 1, 1836 are from *Senate Document* No. 21, 24th Congress, 2d Session, pp. 2-26. Specie held by chartered banks in New York State is the 1836 figure from Fenstermaker, *Development*, p. 218.

figures imply that about 42 percent was in the hands of individuals.¹⁷ The modest specie base, which amounted to \$4.60 (about \$68 in year 2000 value) for every man, woman and child, supported a money stock of \$230 million. The reserve ratio of 15.6 percent for the nation as a whole, when combined with a system of convertibility to the base on demand and a willingness of the public to hold and use coins, produced a vulnerability to precautionary demands for specie. In such a unit banking system, a drain of specie due to international calls, government-directed balance transfers, or an initiative such as the Specie Circular could easily generate runs. I will argue later the specie withdrawals in the late Spring of 1837 were largely precautionary and quite moderate on an individual level, but that the coin remained in the hands of the public for several months after the panic. For now, I will set the stage by examining the supplemental Treasury operations of 1836-1837 and their contribution to the specie drain.

THE SUPPLEMENTAL TREASURY OPERATIONS

The aspect of the Deposit Act of June 23, 1836 (also known as the “Distribution Act”) that raised the most concern among its opponents was the return of the federal surplus to the states in proportion to their populations. Less controversial were provisions that prohibited government deposits from exceeding three-fourths of a bank’s paid-in capital and required the establishment of at least one bank as a government depository in each state that chartered banks. To comply with the latter provision, then Secretary of the Treasury Levi Woodbury quickly selected 45 new deposit banks, increasing their number from 36 in June of 1836 to 81 by December.

Knowing that much of the surplus was on deposit in the commercial centers, Woodbury asked Congress in late June if he could also prepare for the official distribution that was to begin on

¹⁷ The aggregate specie stock and its components are August 1836 figures from Jack Lewis Rutner, *Money*, p.168.

January 1 while reallocating balances to meet the new deposit limits. Congress responded by amending the Deposit Act on July 4 to state that “nothing in the act, to which this is a supplement, shall be construed as to prevent the Secretary of the Treasury from making transfers from banks in one State or Territory, to banks in another State or Territory, whenever such transactions may be required, to prevent large and inconvenient accumulations in particular places, or to produce a due equality, and just proportion, according to the provisions of the said act.”¹⁸ With his discretion affirmed, the Secretary ordered more than \$38 million in “supplemental” interbank transfers over the next six months, with nearly two-thirds involving interstate transactions.¹⁹ Of the total, \$26.4 million were completed by the end of 1836, with 57 percent crossing state lines. Most of the remaining orders were completed in the first quarter of 1837, with 79 percent requiring interstate movement. The supplemental transfers stand apart from the \$28 million transferred in the official distribution, of which only 22 percent crossed state lines.

Despite Woodbury’s efforts, an increase in government balances from \$34 million in June of 1836 to nearly \$43 million by December limited his ability to achieve the distribution among the states that soon would be required. Collections over this period were twice as large as payouts, and more than half of the \$22 million in new revenues would require movement from their point of receipt. Woodbury recognized that continued inflows would dramatically increase the transfers that would become necessary for New York, where the federal deposits had already accumulated far

¹⁸ 24th Congress, 1st Session, Ch. 355.

¹⁹ With regard to the dual purpose of “regulating the banks” and preparing for the distribution, Woodbury reported in December 1836 that “in several cases, both objects or purposes, when convenient, were seasonably united, and with a mitigated and more beneficial effect, it is believed, on the whole administration of the law, and the condition of the money market generally, than if all the transfers to all the different states had been delayed till next year, and at that time ordered in much larger sums” (U.S. Congress, *Senate Document No. 29*, 24th Congress, 2d Session, p. 3).

beyond the state's population share. He therefore focused the supplemental transfers in the Summer and early Fall of 1836 on gradually moving large sums from New York. The secret nature of these transfers first led contemporary observers to misunderstand the causes of the rising monetary pressure in August, but as the extent of the transfers became known, they were criticized, along with the Specie Circular, and held responsible for the pressure that had risen to a fever pitch by October.²⁰

Woodbury, who had underestimated the strain that these operations would place on the New York banks, responded by delaying until January more than \$1.3 million in interstate transfers that were originally scheduled for November and December of 1836. As the Specie Circular began to drain reserves from the New York banks, he also attempted to bring coins back to the East in the Fall and early Winter with a new set of transfers from the Michigan and Ohio banks. These measures brought some relief to the money market in December, but the pressure soon re-intensified as the delayed transfers, most of them interstate, came due along with those of the official Distribution.

Responding to a demand from legislators to quantify the impact of the supplemental operations on the tightening money market, Woodbury's annual report to the Senate on December 20, 1836 specified the individual orders by sending and receiving bank and the date on which each transfer became effective or would be completed in early 1837.²¹ Table 1 summarizes the gross amount of Treasury orders completed in each month from July 1836 through July 1837. The left panel shows the supplemental transfers while the right panel provides similar figures for the official

²⁰ The *New York Herald* reports on September 8 that "another cause of the decline of the markets (in addition to concern about the upcoming Presidential election) is the heavy surplus revenue that is to be collected and gathered up for payment to the states on the 1st of January – probably 36 millions of dollars. The transfer of moneys from one point to another, in preparation for the great payment, necessarily creates a curtailment of discounts, and a consequent pressure in the money market. All these causes unite at this moment to bring on a panic. The government adds to it. Specie is bought at 2 percent premium on Wall Street to go west in payment of public lands."

²¹ U.S. Congress, *Senate Document* No. 29, 24th Congress, 2d Session, pp. 8-20. All figures in the text concerning the supplemental operations are derived from this source.

TABLE 1
Transfers Ordered by the U.S. Treasury, 1836-1837

	Supplemental			Distribution of the Surplus		
	Intrastate	Interstate	% Inter	Intrastate	Interstate	% Inter
Jul 1836	\$1750.0	\$819.0	31.9%	\$0	\$0	...
Aug 1836	2305.0	2642.0	53.4	0	0	...
Sep 1836	2681.1	3134.5	53.9	0	0	...
Oct 1836	1874.0	3690.0	66.3	0	0	...
Nov 1836	1353.8	2410.0	64.0	0	0	...
Dec 1836	1485.0	2300.0	60.8	0	0	...
Jan 1837	605.0	3470.0	85.2	8104.4	1211.8	35.0%
Feb 1837	680.0	1935.0	74.0	0	0	...
Mar 1837	565.0	1600.0	74.0	0	0	...
Apr 1837	525.0	860.0	62.1	7924.9	1348.8	14.5
May 1837	175.0	460.0	72.4	0	0	...
Jun 1837	0	600.0	100.0	0	0	...
Jul 1837	0	20.0	100.0	6952.8	2484.3	26.3
Jul-Dec 1836	11448.9	14995.5	56.7	0	0	...
Total	13998.9	23940.5	63.1	22982.1	5044.9	18.0

Sources: Supplemental transfers from *Senate Document No. 29*, 24th Congress, 2d Session (December 20, 1836, pp. 8-20); details of Distribution of the Surplus from *House Executive Document No. 30*, 25th Congress, 1st Session (September 26, 1837, pp. 10-20, 72-81).

Notes: Amounts are in thousands of dollars. Transfers are recorded in the month during which each became effective. This delays until April the recording of \$45,584 in transfers that were for accounting purposes officially associated with the 1st installment of the distribution, and delays until July \$100,000 in transfers that were associated with the 1st and 2nd installments.

Distribution.

The supplemental transfers were more than 35 percent larger than the official ones and involved nearly five times as many interstate orders. Further, the supplemental orders carried out between June 1836 and April 1837 were more than double those ordered in the course of normal payment operations from June 1835 to April 1836. And though the details of the 1835-36 orders are not available, the 1836-37 transfers, due to the provisions of the Deposit Act, would surely have involved more interstate movements. The \$7 million in interstate supplemental transfers that were completed in the first quarter of 1837 were especially disruptive, and came just as the \$18 million

(\$2.5 million interstate) involved in the first and second installments of the official distribution were also due.

Timberlake does not mention the supplemental transfers, while Temin suggests that they were perhaps routine.²² Nonetheless, both acknowledge that a large proportion of the interstate transfers and nearly all interregional transfers associated with the official Distribution would have involved specie. To the extent that this is true, the interstate transfers associated with the supplemental operations, given their interbank nature, were even more likely to have been drawn largely in specie. Since Temin reports the total specie in the United States at only about \$73 million at the end of 1836, specie movements such as those suggested by the interstate transfers in Table 1 would have represented a significant portion of the nation's stock.²³

Granted that the supplemental transfers were large, it is appropriate to ask next if they diverted specie to the Western states. An analysis of the individual transfer orders, however, shows that they primarily directed funds from North to South and from West to East. Nevertheless, when viewed beside the balance sheet items of the deposit banks at a regional level, the timing and size of both the supplemental and official net transfers shed light on the paths through which specie may have moved about the country and on the strains that these transfers caused, especially in the Spring of 1837.

Table 2, which presents previously unorganized information from various congressional documents (see note to table), divides the deposit banks into five groups covering New York City, the Western states (Ohio, Indiana, Illinois and Michigan), the Southwestern states (Alabama, Kentucky, Louisiana, Mississippi, and Tennessee), the Southeastern states (Georgia, North Carolina,

²² Timberlake, "Specie Circular"; and Temin, *Jacksonian Economy*, pp. 134-5.

²³ Temin, *Jacksonian Economy*, p. 71.

TABLE 2
Selected Balance Sheet Items of the Deposit Banks and Interregional
Transfers Ordered by the U.S. Treasury, August 1836 - August 1837

	No. Banks	Specie	Loans	Government Deposits	Circulation	Supplemental Transfers	Distribution of Surplus
<i>New York City</i>							
Aug 1, 1836	14	\$5877.3	\$38150.8	\$14457.1	\$5138.3	\$-1932.0	0
Sep 1, 1836	14	7191.9	37089.3	13756.2	4849.1	-1843.5	0
Oct 1, 1836	14	5142.4	36633.7	12549.2	5825.1	-1845.0	0
Nov 1, 1836	14	3804.3	34563.8	11279.5	4590.8	-430.0	0
Dec 1, 1836	14	3810.5	34637.0	11705.0	7121.5	-1455.0	-496.9
Mar 1, 1837	14	2780.5	32537.3	9153.7	5008.7	-770.0	-577.9
May 1, 1837	14	1473.1	29659.9	4909.8	3745.5	0	0
Jul 1, 1837	14	1768.4	26307.1	3870.1	3665.1	0	-1098.2
<i>Illinois, Indiana, Ohio, Michigan</i>							
Aug 1, 1836	10	\$2468.9	\$12955.3	\$10374.5	\$5957.9	\$-350.0	\$0
Sep 1, 1836	11	2394.7	13689.0	10079.4	5805.7	-760.0	0
Oct 1, 1836	13	2078.0	13864.5	9460.4	5635.5	-950.0	0
Nov 1, 1836	15	2780.6	14418.7	9085.9	5772.9	-930.0	0
Dec 1, 1836	14	2953.2	14224.6	9142.5	5833.4	-2910.0	0
Mar 1, 1837	14	3392.2	15876.1	7026.3	7015.4	-400.0	-37.5
May 1, 1837	14	3418.4	9770.4	5747.1	6767.6	-100.0	0
Jul 1, 1837	13	2980.9	9616.8	4523.0	5681.7	0	-150.0
<i>Alabama, Kentucky, Louisiana, Mississippi, Tennessee</i>							
Aug 1, 1836	9	\$2177.4	\$44870.9	\$8649.5	\$12120.8	\$250.0	\$0
Sep 1, 1836	13	2559.2	48971.8	9171.1	13055.2	300.5	0
Oct 1, 1836	14	3018.3	54089.1	9674.7	13920.1	400.0	0
Nov 1, 1836	14	2983.0	54871.8	10183.7	13509.1	530.0	0
Dec 1, 1836	14	3328.2	55237.4	10681.0	13676.6	450.0	-45.6
Mar 1, 1837	14	3498.2	56572.0	10685.8	15483.5	-950.0	-45.6
May 1, 1837	14	2934.6	27419.6	8613.9	12957.2	-800.0	0
Jul 1, 1837	14	2373.4	32470.7	7170.9	10490.4	0	-438.4
<i>Georgia, N. Carolina, S. Carolina, Virginia</i>							
Aug 1, 1836	5	\$1955.1	\$17546.1	\$2031.9	\$8392.4	\$800.0	\$0
Sep 1, 1836	5	2045.1	17360.3	2230.1	8751.7	1000.5	0
Oct 1, 1836	7	2982.1	19615.6	2731.2	10489.4	1350.0	0
Nov 1, 1836	7	2957.5	23068.1	3882.9	10636.8	0	0
Dec 1, 1836	8	2971.5	24736.2	3681.4	11312.6	1610.0	0
Mar 1, 1837	8	3006.2	26089.0	2910.0	11645.2	550.0	0
May 1, 1837	9	2730.0	16532.6	1679.6	9022.4	0	0
Jul 1, 1837	9	2320.7	16372.3	1810.9	7287.1	0	0

TABLE 2
Selected Balance Sheet Items of the Deposit Banks and Interregional
Transfers Ordered by the U.S. Treasury, August 1836 - August 1837

	No. Banks	Specie	Loans	Government Deposits	Circulation	Supplemental Transfers	Distribution of Surplus
<i>Delaware, Maryland, New Jersey, Pennsylvania</i>							
Aug 1, 1836	8	\$1136.5	\$16656.4	\$4001.2	\$2660.1	\$352.0	\$0
Sep 1, 1836	8	1329.7	17226.0	4467.9	2509.0	246.0	0
Oct 1, 1836	9	1324.6	17370.0	4853.9	2801.2	55.0	0
Nov 1, 1836	10	1114.1	18156.7	5138.6	2894.4	-515.0	0
Dec 1, 1836	10	1264.5	18146.7	4760.4	2761.3	1860.0	-84.9
Mar 1, 1837	10	1322.0	18559.4	4757.3	2630.6	1200.0	-84.9
May 1, 1837	10	776.5	14454.4	3241.3	2272.2	700.0	0
Jul 1, 1837	9	680.6	13559.4	1720.9	1951.7	0	-192.4
<i>New England</i>							
Aug 1, 1836	10	\$716.5	\$7168.2	\$2741.9	\$1150.0	\$380.0	\$0
Sep 1, 1836	17	823.1	10075.5	3183.6	1714.4	757.5	0
Oct 1, 1836	24	919.6	12977.1	4063.6	2469.7	515.0	0
Nov 1, 1836	24	953.8	13419.0	4671.0	2462.9	100.0	0
Dec 1, 1836	24	884.6	13282.0	4519.8	2149.7	150.0	0
Mar 1, 1837	25	988.3	13203.6	3863.2	2043.3	150.0	0
May 1, 1837	25	817.5	9498.2	2204.8	2211.4	200.0	0
Jul 1, 1837	24	604.0	8665.3	783.4	1754.3	0	0

Sources: Balance sheet items on or around the 1st of March, May, and July of 1837, and details of the Distribution of the Surplus from *House Executive Document* No. 30, 25th Congress, 1st Session (September 26, 1837, pp. 101-45). Items on or around the 1st of August through December of 1836 from *Senate Document* No. 21, 24th Congress, 2d Session (December 26, 1836, pp. 2-27). Supplemental transfers from *Senate Document* No. 29, 24th Congress, 2d Session (December 20, 1836, pp. 8-20).

Notes: Amounts are in thousands of dollars. "Interregional" transfers are defined as those made from within one of the geographic groupings outlined above to a state outside of the group. These flows are recorded from the date given in the left column to that in the next row.

South Carolina and Virginia), the mid-Atlantic states (Delaware, Maryland, New Jersey and Pennsylvania), and the six New England states. The upper panel shows the interregional transfers made by the deposit banks of New York City, which lost 37 percent (\$5.3 million) of their government deposits between August 1, 1836 and March 1, 1837 in the course of completing more

than \$8 million in such Treasury-ordered transfers. A loss of 61 percent (\$4.4 million) of their specie coincided with the transfers, yet loans fell by only 14.7 percent (\$5.6 million). The New York City banks lost a good deal of specie and did not contract their loans commensurately.

The West was the only other region that was consistently called upon for large interregional transfers. The second panel of Table 2 shows that the deposit banks in Ohio, Indiana, Illinois and Michigan transferred more than \$5.8 million out of the Western region between August 1 and March 1, yet their government deposits fell by only \$3.3 million. One sensible explanation for the slower decline of reserves would be offsetting deposits by federal receivers in specie for public land purchases.

The Southwestern states were net recipients of the transfers through April, but the regional totals mask the pressure which came to bear upon New Orleans in the Spring. In particular, much of the transfers to the Southwest in the Fall of 1836 were drawn down by later orders, which had been delayed by Woodbury from January 1, 1837 until February, March and April. For now, I simply observe that loans of Southwestern banks also rose by 15.5 percent (\$7.6 million) between September 1 and March 1, only to fall by 51.5 percent (\$29.2 million) over the next two months. Southwestern banks contracted loans sharply as their government deposits dwindled and panic conditions intensified.

The remaining panels of Table 2 indicate that the Southeastern, mid-Atlantic and New England states were net recipients of the interregional transfers. Only the Southeastern deposit banks, however, saw their specie reserves grow significantly between September 1, 1836 and March 1, 1837, and even then by only \$1 million with most of the gain in September. Nevertheless, \$1 million represents 25 percent of the total decline of about \$4 million in the specie holdings of the New York City deposit banks over this period. If, as discussed later, specie was being used to start

TABLE 3
Interstate Transfer Orders Drawn on Deposit Banks of Selected States, July 1836 - July 1837

	Supplemental Transfers												Official Installments			Totals
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	1st	2nd	3rd	
<i>From New York to</i>																
New England	55	380	453	51			150						173	248		1510
Delaware	30	140											46	46	37	299
Pennsylvania							100									1000
New Jersey	44	222	206	50			50						130	110	90	902
Washington, DC	200	400	150	340	230	100		25	170	50						1665
Georgia			200	300			350		200						150	1200
North Carolina		100	400	100			50		200	50			163	163	163	1389
South Carolina		300	200	100			280								100	980
Virginia		400	100	850			900	100	100					175	200	2825
Mississippi				200												200
Tennessee														50		0
U.S. Mint		200			200											50
<i>NY Totals</i>	299	2002	1849	2455	430	100	1880	125	670	100	0	0	512	792	740	11520
<i>From Michigan to</i>																
New York				400		270										670
New England			460	150	100											710
Pennsylvania				100	200	200	80	80	100	100						860
Washington, DC	20															20
Ohio				100	100	60	70	50								380
<i>MI Totals</i>	20	0	460	750	400	530	150	130	100	100	0	0	0	0	0	2640
<i>From Ohio to</i>																
Pennsylvania		100				500	100								150	850
Arkansas													17	16		33
Kentucky		100	100				190	390								780
Louisiana				200	400	200										800
Tennessee							300				100			38		438
Illinois													80	80		160
<i>OH Totals</i>	0	200	100	200	400	700	590	390	0	0	100	0	97	135	150	3061

TABLE 3
Interstate Transfer Orders Drawn on Deposit Banks of Selected States, July 1836 - July 1837

	Supplemental Transfers												Official Installments			Totals	
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	1st	2nd	3rd		
<i>From Mississippi to</i>																	
New York							100										100
Delaware									100	100							200
New Jersey									100	100							200
Arkansas																187	187
Tennessee					100	100	150	400					125				875
<i>MS Totals</i>	0	0	0	0	100	100	250	400	200	200	0	0	125	0	187		1562
<i>From Louisiana to</i>																	
New York				100		100	200										400
Massachusetts									150			200					350
Maryland								300	100	150	150	200					900
Pennsylvania						100	100	300	200	150	150	200					1200
Arkansas																34 ^a	34
<i>LA Totals</i>	0	0	0	100	0	200	300	600	450	300	300	600	0	0	34		2884

Sources: Supplemental transfers from *Senate Document No. 29*, 24th Congress, 2d Session (December 20, 1836, pp. 8-20); details on individual installments of the Distribution of the Surplus from *House Executive Document No. 30*, 25th Congress, 1st Session (September 26, 1837, pp. 72-81, 101-145).

Notes: Amounts are in thousands of dollars. The table shows the destination of all interstate transfers ordered for banks in New York, Michigan, Ohio, Mississippi, and Louisiana.

a - this payment was recorded by the Treasury as a blending of the first and second installments for accounting purposes, but was not ordered until June 7, which would chronologically place it with the third installment.

banks in the Southeast, the specie balances of these new banks would not have appeared in the Treasury's reports. Loans by the Southeastern deposit banks rose by 51 percent (\$8.7 million) from September to March.

Table 3 presents gross transfers on a monthly basis between July of 1836 and June of 1837 for those states whose government balances were drawn upon most heavily. These states include New York and those where deposits from public land sales were the largest, namely Michigan, Ohio, Mississippi, and Louisiana.²⁴ The table shows that the majority of New York's transfers in the Fall were directed to the Southeast, and by January 1 more than \$4.6 million had been sent there. There is direct evidence that at least some of these transfers were made in specie.²⁵ The table also provides details of the Treasury's attempts to return funds from the West to points of financial stress, and to Eastern cities in particular. Michigan sent nearly \$0.9 million to Pennsylvania between October 1836 and April 1837, and \$0.7 million each to New York and the New England states in the Fall of 1836. Ohio was called upon to replenish the Eastern and Southwestern money centers, with transfers of \$0.7 million to Philadelphia and \$0.8 million each to New Orleans and Louisville. Mississippi banks had transferred \$0.75 million to Nashville by February, and \$0.4 million to the mid-Atlantic states. Specie continued to accumulate in the Western banks (see Table 2) despite the Treasury's efforts to remove it.

²⁴ Most of the proceeds from the large public land sales in Missouri and Illinois eventually found their way to Ohio banks.

²⁵ For example, The *New York Herald* reported on October 14, 1836 that "in aggravation of this state of things (in the money market) the government is drawing on the banks for specie, in favor of the south and west. The Manhattan Bank was called upon for \$150,000 on Tuesday." The bank which made this particular draw is not clear from the transfer records, but over \$0.4 million came due from the Manhattan Bank to banks in Georgia, North Carolina, South Carolina and Virginia in this week alone. The *Herald* reported on September 29 that "it is surmised that heavy demands for specie have come upon the city from the west and south. It is also said that some cool feelings, and reciprocal too, exist between the Secretary of the Treasury and certain large deposit banks on Wall Street."

The transfer orders followed a geographic pattern that exploited the existing transportation network to facilitate the movement of specie. The New York banks made transfers to cities along the coastal waterway because this route was convenient for shipping bulkier silver coins. The Cincinnati banks sent silver downstream along the Ohio and Mississippi rivers to states in the mid-South and New Orleans, and shipped a more limited amount by river, rail and canal to the nearest tidewater near Philadelphia. Mississippi and Louisiana were called upon for limited and more risky upstream transfers to the neighboring states of Tennessee and Arkansas, but most of their transfers involved the coastal route to points in the Northeast. Michigan presented a unique problem as gold from the Northeast began to accumulate. The Secretary recognized the relative isolation of this state from points South, and thus called upon Michigan to replenish the specie of the Northeastern states via the Erie Canal.

The transfers from New York to the Southern coast and from Ohio to the Southern interior were in preparation for the upcoming Distribution, as the Southern states held government deposits that were far smaller than the funds to which they soon would become entitled. Transfers from Michigan and Indiana moved excess revenues to money centers where they would be required (i.e., New England) or redirected yet again (i.e., New York and Pennsylvania). If Woodbury had expected these interstate transfers to involve primarily bookkeeping or paper transactions among the deposit banks, adherence to paths of most convenient transport for a heavy and valuable item would have been less critical, and it is less likely that such a clear geographic pattern would have emerged.

Woodbury's report to the Senate on December 20, 1836 included a table that summarized the extent of the supplemental operations.²⁶ In light of the details from the same report that are organized in Table 2 and Table 3, it can only be described as misleading. In particular, the summary indicates that New York and Michigan were the only states to suffer net losses of government

²⁶ U.S. Congress, *Senate Document* No. 29, 24th Congress, 2d Session, Appendix C.

deposits in excess of \$250,000 between June 20 and December 19, 1836, and that these losses were only \$570,000 and \$430,000 respectively. Temin, using these figures, reasons that the hardship must have been small since they represented only 5% of New York's government deposits in June.²⁷ The net changes in government deposits, however, ignore the \$22 million in new revenues that accumulated between these dates, mostly in New York and the West. Seen in this light, the failure of government balances to fall more sharply in New York in the second half of 1836 is much less striking. Further, moving the start of the reporting period from June 20 to August 1, which is closer to the effective date for the first supplemental transfers, shows government deposits in New York falling by \$2.75 million, or nearly 19 percent, by December 1 as the pet banks completed more than \$6 million in interstate transfers (see Table 3). The supplemental operations alone account for an additional \$1.4 million in interstate transfers for New York between December 1 and March 1 as government deposits fell by an additional \$2.7 million there. These losses are not reflected in the Treasury's table. The drain of funds from New York was larger and would come to be much larger than indicated by the summary.

Similarly, Michigan suffered a net loss of \$1.7 million in government deposits between August and December. This is significant not because Michigan banks were forced to contract loans, but because their specie reserves continued to rise despite the \$1.4 million in funds that were transferred to the East (see Table 3). Rather than illustrate Michigan's insignificant role in the crisis, these figures support the belief that specie accumulated rapidly there as public land sales maintained a brisk pace.

The main difficulty in assigning a key role to the Specie Circular in bringing on the panic has always been a lack of convincing evidence that large amounts of specie left the Eastern money

²⁷ Temin, *Jacksonian Economy*, pp. 135-6.

centers to points in the South and West. The above evidence suggests that specie did indeed leave New York, while the transfer orders suggest that at least some of it moved South. The accumulations in Michigan and Indiana and the limitations imposed by the simple transportation network also point to New York as the source of the Western increases.²⁸ This story of internal specie movement is reinforced by the fact that net specie imports for the U.S. were small between August 1836 and May 1837.²⁹ The total specie holdings of the nation's deposit banks were also relatively steady over this period, rising from \$14.6 million on August 1 to only \$15.3 million on March 1. Since neither the quantity of specie in the nation nor the amount held in the deposit banks changed dramatically, the clear decline in New York and increases in the West and South suggest that specie did indeed move actively about the country.

MORE EVIDENCE OF A WESTWARD SPECIE DRAIN

This section analyzes the timing, size, composition, and location of individual deposits made in the pet banks by federal receivers who operated in the West and Southwest from the date of the Specie Circular's enactment through September of 1837. Woodbury prepared these records to comply with a September 30, 1837 resolution by the House of Representatives, whose members hoped to analyze the causes of the May panic. The report provides a breakdown of deposits into gold, silver, bank note, and "unspecified" components.³⁰ It also includes a summary table with the

²⁸ Scheiber's "Pet Banks" (p. 206), in an examination of some of the surviving correspondence between directors of Western banks and Woodbury, finds that the Bank of Michigan removed \$0.5 million in specie from New York in October, 1836 to meet the demand generated by land sales. The Commercial Bank at Cincinnati is also known to have brought \$0.3 million in specie from the coast between June and October.

²⁹ Rutner (*Money*, p. 168) reports an increase of only \$2.2 million in the nation's specie stock over this period.

³⁰ U.S. Congress, *House Executive Document* No. 18, 25th Congress, 2d Session, December 11, 1837, pp. 11-31.

total amount and composition of receipts by state as compiled by the Commissioner of the General Land Office. The records show that the Specie Circular created a sizeable demand for specie in the West and Southwest almost immediately after its enactment on August 15, 1836 and that demand intensified as exceptions for “actual settlers” expired in December.

Table 4 summarizes the breakdown of deposits, usually on a bimonthly basis. The frequency is necessary because many receivers made deposits in the pet banks only sporadically, with an individual receiver making on average about one deposit every seven weeks between August 1, 1836 and May 15, 1837. These delays produce an excessively lumpy month-to-month view of land office activity.

August 1836 appears separately because public land sales and deposits were large in this month, perhaps in anticipation of the enforcement of the Specie Circular. The data also offer the only available insights about the composition of funds used to purchase public lands prior to the Circular’s enactment. Among those August deposits for which the composition was specified (nearly 60 percent nationally), only 6 percent were in specie, and gold deposits were a mere 2 percent of the specie total. Since some deposits were made after August 15 and should have involved purchases for which specie was required, it is reasonable to presume that specie was seldom if ever used in public land purchases prior to the Circular’s enforcement. The rising use of specie that appears in the records for September and October suggests that circumvention of the specie requirement may have been more difficult than earlier accounts have assumed, especially in the Northwest. Since the more sparsely populated Michigan probably had fewer land purchases by “actual settlers” and state residents than the Southern states, its percentage of specified deposits in specie rose most dramatically to more than 55 percent. Silver was the metal of choice for public land purchases in the nation as a whole, but gold was used for a large proportion of purchases in

TABLE 4
Deposits by Land Office Receivers, August 1836 - May 1837

	Aug 1836				Sep-Oct 1836				Nov-Dec 1836			
	Deposits (\$)	Specified (%)	Specie (%)	Gold (%)	Deposits (\$)	Specified (%)	Specie (%)	Gold (%)	Deposits (\$)	Specified (%)	Specie (%)	Gold (%)
Indiana	\$712.3	36.0	16.3	2.6	\$488.8	100.0	39.7	10.5	\$637.7	41.4	48.3	13.9
Michigan	753.3	73.4	0.5	0	384.8	94.8	56.0	40.7	588.0	100.0	51.0	28.8
Ohio	504.4	75.4	10.3	1.7	1150.5	72.2	38.3	5.0	849.7	92.1	41.5	12.4
Alabama	51.7	55.1	0	0	455.8	95.5	7.3	0.6	439.0	100.0	8.6	2.3
Louisiana	184.0	78.4	0	0	94.9	71.0	42.3	25.6	112.5	68.0	69.9	31.5
Mississippi	142.3	30.8	2.5	0	183.9	72.0	23.0	3.0	146.5	100.0	32.7	2.7
Kentucky	0	...	...	...	35.3	56.3	76.3	0	140.1	84.4	51.6	1.3
Tennessee	36.4	0	...	...	47.9	100.0	2.7	0	0	...	...	...
Total U.S.	2384.3	59.1	6.0	2.0	2841.9	84.0	34.5	15.5	2913.7	82.9	39.4	17.3

	Jan-Feb 1837				Mar-Apr 1837				May 1837			
	Deposits (\$)	Specified (%)	Specie (%)	Gold (%)	Deposits (\$)	Specified (%)	Specie (%)	Gold (%)	Deposits (\$)	Specified (%)	Specie (%)	Gold (%)
Indiana	\$309.0	73.8	92.3	9.5	\$343.6	80.8	100.0	19.4	166.0	100.0	100.0	23.0
Michigan	658.7	100.0	84.8	31.3	293.5	100.0	100.0	27.7	271.3	85.3	100.0	37.4
Ohio	413.7	80.6	53.6	17.6	741.2	97.4	95.6	7.1	186.3	99.3	100.0	5.2
Alabama	282.1	73.3	71.2	1.5	129.9	88.3	65.1	2.1	68.6	100.0	100.0	2.3
Louisiana	83.7	34.8	63.7	8.0	271.5	91.4	94.7	40.5	11.9	0	...	...
Mississippi	257.5	77.5	68.1	1.0	121.4	55.0	100.0	2.3	8.1	100.0	100.0	0
Kentucky	0	...	...	...	146.2	53.4	100.0	2.8	21.6	100.0	92.0	4.1
Tennessee	0	...	...	...	24.7	100.0	100.0	5.0	0	...	...	...
Total U.S.	2004.6	82.6	75.5	18.5	2072.0	88.1	95.3	16.4	733.7	92.8	99.7	20.2

Source: Monthly returns from *House Executive Document* No. 18, 25th Congress, 2d Session (December 11, 1837, pp. 11-31).

Notes: The column labeled "Deposits" contains the dollar amount (in thousands) that was placed for the U.S. Treasury in the deposit banks of the state listed in the left column. The column labeled "Specified" includes the percentage of the deposited amount for which the type of money (gold, silver, or bank paper) was recorded. Among the specified deposits, the percentage made in specie is given in the third column, and among the specie deposits, the percentage made in gold is presented in the fourth column. Deposits fell sharply after May of 1837, with only \$47,851 for the entire nation in June, \$106,866 in July, \$18,418 in August.

Michigan. This is consistent with a drain of gold from the East, since the canal, lake and overland transport involved in moving specie to Michigan was costly, and gold was a less costly medium than silver. Further, monthly data (not shown) indicate that deposits by Michigan's receivers, who were the most frequent depositors, fell from \$0.75 million in August to \$0.09 million in September and then rose to \$0.29 million in October. This pattern is not apparent in other states, and is consistent with a role for the specie requirement in slowing sales of Michigan lands in September until arrangements could be made to transport specie from the East.

There are three alternatives to this interpretation. The first would require Michigan residents to have hoarded the gold used for land purchases in the Fall, the second would require the Michigan banks to have held large sums of gold in their vaults prior to the Circular's enactment, and the third would have required gold to reach Michigan from sources other than the Eastern cities. Since state residents could continue to use bank paper to purchase land until December 15, it is unlikely that the gold used in October had been hoarded by them. As the specie reserves of all Michigan state banks rose from a mere \$137,510 in 1835 to \$554,292 in 1836, the gold also did not come from pent-up reserves.³¹ Since the transport of silver, some of Mexican origin, upstream from Louisiana along the Mississippi and Ohio Rivers and then overland to points in Michigan was much more costly than the lake route, it would not have been attempted with any frequency. Given the alternatives, it is thus likely that the gold (and silver) used for land purchases in Michigan came from New York, the center of the international trade for which gold was the standard medium for settlements.

By March of 1837, nearly all specified deposits by public receivers were reportedly made in specie. Perhaps surprisingly, land sales, though never again reaching the levels of August 1836, also remained very strong. The Specie Circular reduced but could not eliminate the demand for public

³¹ Fenstermaker, *Development*, Table B-15, p. 209.

lands. Rather, speculation was so intense that it created an extraordinary and somewhat unexpected demand for specie in the West and Southwest. In fact, at least \$7.3 million in specie was used in U.S. land purchases between July of 1836 and September of 1837, with \$1.8 million used in Indiana, \$1.4 million in Michigan, and \$1.1 million in Illinois.³² These figures do not even consider deposits of “unspecified” composition, which totaled \$1.9 million in Mississippi and smaller but considerable levels elsewhere. Using the data in Table 4 and the assumption that unspecified deposits had the same composition for each state as the specified ones, I estimate the amount of public land purchases in specie to be closer to \$8.4 million between July of 1836 and May of 1837.

Any turnover of specie in land purchases would have reduced the need for infusions from the East. Given the frequency of deposits by receivers, if specie turned over four times between August 1, 1836 and May 15, 1837, about \$2.1 million would still have been needed. There are several factors, however, which suggest that the velocity of specie for land purchases was lower. First, the demand for specie rose through time, with about \$1 million needed for September and October but \$2 million needed for March and April. This rising demand should have generated calls on Eastern banks. In addition, the \$2.6 million which Michigan alone returned to the East could have been drawn in specie. Since Michigan transferred these funds mainly to Pennsylvania and New England, especially after October (see Table 3), the accelerating land purchases would have required even larger calls on New York in the Winter and early Spring, contributing further to the monetary strain in that city.

Viewed from this perspective, the Specie Circular was hardly an innocuous measure.

³² U.S. Congress, *House Executive Document* No. 18, 25th Congress, 2d Session, p. 8

DOMESTIC TRIGGERS OF THE PANIC

Barely evading financial collapse in November of 1836, the U.S. economy entered 1837 with optimism that the marketing of the 1836-37 cotton crop, which had proceeded as expected for the first half of the selling season, would provide the foreign credits needed to ease the monetary pressure. Nevertheless, when the next set of supplemental interstate transfers, many of which had been delayed from November and December, came due in January along with the first installment of the official distribution, the pressure immediately resumed. New York met its largest interstate orders in January -- \$2.3 million in total (see Table 3) -- most of which were directed to the Southeast, and then braced to make the additional \$1.7 million in interstate transfers ordered for February, March, and April.

The Treasury also abandoned its interest in retrieving specie from the West in early 1837. It instead called upon banks in Louisiana and Mississippi to restore primarily mid-Atlantic balances. For example, the New Orleans banks sent \$1.65 million to the Northeast between January and April, while the Natchez banks sent \$0.5 million to the Northeast and an additional \$0.55 million to Nashville. Both Louisiana and Mississippi were states in which land purchases remained active through early 1837. Newspaper accounts suggest that the profitability of the cotton trade had driven sales of both public and private lands to unprecedented levels, which continued to divert specie from commercial channels.³³ It also appears that specie was accumulating in the land offices of Arkansas,

³³ The cashier of the Agricultural Bank describes the situation in Natchez in an April 5 letter to Woodbury which states that “the demand (for specie) during the last two or three months so far exceeds all experience as to induce the banks to part with it very reluctantly upon any terms. Nearly every dollar received for produce is immediately demanded in coin; bank balances for collections made of our merchants have to be paid in specie, and the demand for it, for purchase of lands, still continues to a burdensome extent. This has made it inexpedient for the banks to make new discounts (*House Executive Document* No. 30, 25th Congress, 2d Session, September 26, 1837, p. 58).” It is interesting that this letter, written only a month before the suspensions, contains no mention of cotton prices.

where receivers delayed deposits in the Southwestern pet banks for an average of three months between October 1836 and May 1837. On April 1, for example, about \$130,000 was “locked up” there.³⁴

As pressure mounted in the South, the New York newspapers offered increasing attention in February and March to the city’s loss of specie. On February 6, Philadelphia called upon New York for \$500,000 in specie to meet Southern calls associated with the supplemental operations.³⁵ The expansion of bank capital in the Southeast over the Winter also suggests that many of the January calls on New York from this region (see Table 3) were for specie.³⁶ Both the data and contemporary accounts agree that the specie reserves of the New York City banks had fallen to crisis levels.³⁷

It was widely believed that repeal of the Specie Circular would return much of the diverted coin to the East, and by the end of February both Houses of Congress had passed a measure that

³⁴ I compiled this figure from deposit records in *House Executive Document* No. 18, 25th Congress, 2d Session (December 11, 1837, pp. 30-31). The cashier of the Agricultural Bank of Natchez wrote to Woodbury on April 26 that “the Treasurer of Arkansas informs me that large amounts of specie are now at the several land offices of that state, and if the receivers were directed to deposit the above amount, \$100,000, with him, it would be a convenience to all parties. This bank would be greatly accommodated by such an arrangement” (*House Executive Document* No. 30, p. 60).

³⁵ *New York Herald*, February 20, 1837.

³⁶ The March 3 edition of the *Herald* reports that “During the expiring winter the southern and southwestern states have added to their bank capital probably *forty* millions of dollars: South Carolina 12 millions; Mississippi 15 millions; Missouri 5 millions; Georgia and the others the balance of 8 millions. To put this bank capital into action, specie is required. In South Carolina and Georgia the first operations began. Accordingly, to set these banks in operation in the South, drafts for specie are made on New York. Since the 1st of January, it is supposed that \$500,000 in specie has gone south from this city, and probably as much from Philadelphia. A general and combined movement has been made in the south to carry the specie there.”

³⁷ On March 4, the *New York Herald* reported that “our stock of specie now on hand is extremely low— probably not over \$2,500,000 for the whole city. We anticipate much agitation in exchange and specie operations in a few weeks. Virginia, in addition to the other states, has just determined to increase her banking capital by \$5,000,000. This also will require specie.”

would make the notes of specie-paying banks again acceptable for public land purchases.³⁸ President Jackson refused to act on the legislation during his final days in office, however, finally writing on March 3 that the Attorney General had found the language with respect to the use of bank notes so diffuse as to become “a subject of much perplexity and doubt.”³⁹

The next day, attention turned to the new President, whose earlier positions offered hope that he might reverse some of the more controversial monetary policies of his predecessor.⁴⁰ Van Buren’s expected signing of the repeal may have even delayed the panic despite reports that Western land sales were slowing. To many observers, a repeal meant yet another expansion of circulation among interior banks, a resumption of active speculation in the public lands, and the maintenance of high land values. By mid-March, however, it became clear that Van Buren was hesitant to sign. There are reports that land values fell.⁴¹ No repeal of the Specie Circular meant that the monetary

³⁸ The *Herald* reported on February 2 that “as soon as the Circular is withdrawn, and the public land system settled in some way, immense quantities of money will come along the lakes and down the canals to New York. Specie is not wanted there (i.e., in the Western states). This emporium is the great point for specie to circulate around.” Even William M. Gouge, who was Jackson’s most eloquent advocate of hard money, wrote to Van Buren on March 18, 1837 that “a repeal of the circular would relieve the pressure at particular points, particularly at New York and New Orleans, but this relief would be effected by drawing specie from the Western states” (*Martin Van Buren Papers*, Series I: January-March 1837).

³⁹ *Niles’ Weekly Register*, March 11, 1837, p. 26.

⁴⁰ For example, it was believed that Van Buren had been originally opposed to the removal of the government deposits from the Second Bank of the United States in 1833.

⁴¹ For example, the *New York Herald* reported on March 14 that “the continued delay of the action of the government in relation to the Treasury Circular is another cause of the heaviness of the markets. The speculations in public lands, which that order was calculated to cut up, have been entirely suspended.—Even the holders of these lands begin to find that they have more on hand than they know what to do with. Government lands in speculator’s hands are now selling at nearly the original price, \$1.50 to \$2.00. Lands in Illinois and Indiana that were cracked up to \$10 an acre last year, are now to be got at \$3, and even less. The reaction has begun, and nothing can stop it.”

pressure in New York City would not soon be relieved by a flow of specie to the East.⁴²

Van Buren's much-publicized inaction certainly had an impact on expectations at a critical stage of the heightening drama. The banking and merchant communities continued to call for repeal, and a group of New York merchants even traveled to Washington in late April in an ineffective attempt to "ruminate" with the President. Of course, it was already too late. The "shaving" of country bank notes by speculators in New York reduced the public's confidence in paper currency. The city's merchants would not accept bills issued by Southern and Western banks as the demand generated by land purchases limited the specie on hand to send as remittances. Internal balances were not paid, and merchants, farmers, and bankers alike all called upon each other for specie in settling debts.

In the midst of a shortage of specie in the money centers, news of a fall in the British price for U.S. cotton appeared in the New Orleans newspapers on March 22. This confirmed earlier rumors of reductions in foreign demand.⁴³ The 17 percent drop in price which ensued between then and the end of April, or from 13.8 cents to 11.5 cents per pound,⁴⁴ appears to have been a result of overproduction in the United States and heightened competition in the British market from India, whose cotton exports underwent a rapid expansion at precisely this time.⁴⁵ Southern merchants and

⁴² Van Buren appears to have decided against a repeal after formally asking his cabinet for advice on March 24 (*Martin Van Buren Papers* Series I, January-March 1837).

⁴³ *Chapman's Commercial Price Current* of February 25 reports cotton prices as "tending upward" at 11 3/4 to 13 1/4 cents per pound for middling Liverpool grade. It also reports that "business, especially for the last two or three days, has been animated, and transactions extensive, and sales have transpired to the amount of about 20,000 bales in the past week." By March 4, the price had advanced to 13 1/2 -14 per pound. On March 8, *Chapman's* reports that "transactions have been rather limited in consequence of a slight decline in demand for foreign markets and the current unfavorable weather." It is not until March 22 that *Chapman's* first reports a fall of 1/2 to 1 1/2 cents per pound.

⁴⁴ Lewis C. Gray, *History of Agriculture*, p. 1027.

⁴⁵ The 1836-37 U.S. cotton crop of 1.128 million bales (Gray, *History of Agriculture*, p. 1026) had been the largest to date. *Niles' Weekly Register*, however, reported on April 1, 1837 that

bankers (as well as their Northeastern correspondents) had grown accustomed to making time bargains on cotton crops, often purchasing as much as two seasons ahead, and the fall in price raised doubts about the ability of cotton factors to meet their current obligations.

The stoppage of payments by one New Orleans cotton factor in particular, Herman, Briggs, and Co., generated considerable excitement in early March. Since the house of J. L. & S. Joseph of New York was under acceptances from Herman-Briggs for several million, the pressure was transmitted to that city as well. It appears, however, that the suspension of the Josephs on March 21, more than six weeks before the bank runs and general suspension, may have been due as much to the declining value of their other assets, which included Eastern real estate and large share holdings in the Lafayette Bank, as to cotton prices.⁴⁶

Though the fall in the price of cotton contributed to the existing financial strain in the Spring of 1837, it was not the fundamental cause of the May panic. Most telling is that the decline came at the end of the annual selling cycle, lowering the total value of real cotton exports in 1836-37 by only \$8 million from the \$71 million that had been received from a 1835-36 crop of roughly the same size.⁴⁷ It is possible that the fall in price changed expectations of the future profitability of the cotton trade, but the historical course of cotton prices in the antebellum United States (Figure 3) indicates

“the same inducement which has operated in stimulating the production of cotton in America has been actively at work in other countries, and an increase may be expected in every country in which cotton is grown. In the East Indies especially, we know that the increase in production has been great. This must have a very marked effect on the demand for American cotton, and will add greatly to the excess of supply over demand.” A report on British cotton trade for 1834-36 which appears in the January 3, 1837 edition of *The London Times* indicates that imports of East Indian cotton had risen from 88,000 bales in 1834 to 118,000 bales in 1835, and 219,000 bales in 1836. These figures respectively represent 9.6 percent, 10.8 percent, and 18.3 percent of British cotton imports in these years. Imports of U.S. cotton remained steady at about 750,000 bales in all three calendar years.

⁴⁶ *Niles' Weekly Register*, March 25, 1837, and *New York Herald*, March 22-23, 1837.

⁴⁷ The nominal comparison is reasonable since consumer prices rose by only 2.7 percent (Paul A. David and Peter Solar, “Cost of Living,” p. 16) between 1836 and 1837, while wholesale prices rose by only 0.8 percent (G. F. Warren and F. A. Pearson, *Wholesale Prices*, pp. 8-9).

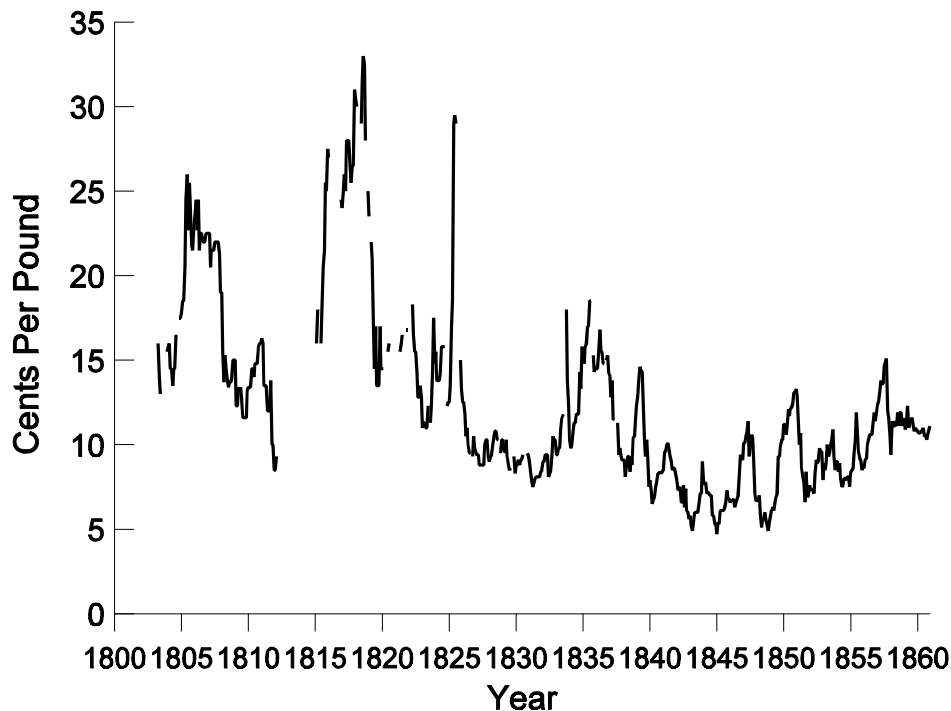


Figure 3.— Monthly Prices of Short Staple Cotton at New Orleans, 1803-1860. Source: Gray, *History of Agriculture*, p. 1027.

that declines of this magnitude were hardly uncommon. Although it is not possible to determine the extent to which cotton prices affected the value of Southern lands, speculators in the public lands usually did not intend to cultivate in the near future and contemporary observers had little reason to believe that the decline in cotton was anything other than temporary. Unless Southwestern farmers and speculators maintained implausibly high time discounts, the fall in price of cotton could not have caused the suspensions.

The domestic tensions in the U.S. economy did raise concern in England, however, that the American propensity to import would combine with the decline in cotton prices to leave the value of U.S. exports insufficient for settling foreign balances. News of the drain of specie to the West also led to suspicions in England that U.S. merchants might be hard-pressed to settle their accounts in specie and lowered confidence in the quality of American bills of exchange. When the prospect of a

specie call became clear in early April, several New York City bankers, with specie reserves in the deposit banks of that city already less than \$2 million, traveled to Philadelphia to confer with Nicholas Biddle, President of the by then state-chartered Pennsylvania Second Bank of the United States. Biddle's bank had removed more than \$1 million in specie from the New York banks in March,⁴⁸ yet the delegation knew that Biddle was one of few U.S. bankers in whom the British had confidence.

Niles' Weekly Register, in a preliminary report of the meeting which appeared in the April 1 edition, indicated that Biddle's solution would involve the export of \$2 million in specie -- \$1 million each from the Second Bank and the New York City banks. Temin interprets the ability of New York banks to contemplate this shipment as key evidence that they were not short of specie.⁴⁹ The next issue of *Niles' Weekly Register* (April 8), however, which details the plan more precisely, does not even mention a specie export from New York. In fact, even the specie export from Biddle's bank was in the end abandoned in favor of issuing paper payable in London with a face value of \$5 million. The *New York Herald*, in documenting these events on a daily basis, also never mentions a specie shipment from New York.. The reason is clear. With their reserves dwindling, the New York banks *could not* seriously plan a \$1 million dollar shipment of specie to England in April. Rather, the banks were in a position to accept Biddle's bond proposal readily.

The turning point in the crisis occurred in New York on May 4, 1836. That morning, and amidst suspicions of mismanagement at the Mechanics' Bank, the death of the bank's president by cardiac arrest triggered a well-publicized run by note holders and smaller depositors. Though the Mechanics' Bank was able to meet all requests in specie, the run represented an ominous loss of

⁴⁸ *New York Herald*, April 1, 1837.

⁴⁹ Temin, *Jacksonian Economy*, p. 133.

public confidence in banks. Runs on the Dry Dock Bank on May 8 and 9 reduced its specie reserves to a mere \$15,000. In total, more than \$600,000 in specie was removed from the city's banks on May 8, and an additional \$700,000 on May 9.⁵⁰ Since Table 2 shows the city's pet banks with only \$1.5 million in specie on May 1, the system could not withstand another day of runs. Most of the city's banks suspended on the evening of May 9, and the remainder on the morning of May 10.

The New Orleans banks suspended specie payments on the morning of May 13 after a Friday night meeting of the city's bank directors. News of the New York suspensions had not yet reached New Orleans, but news of the May 4 run on the Mechanics' bank had arrived on May 12 and probably prompted the evening meeting.⁵¹ The nature of the Mechanics' run, which symbolized the transmission of the panic to the working classes, when combined with the large transfers that the city's banks made in the Spring, motivated the wavering New Orleans bankers to take action. Thus, the suspensions in New York and New Orleans were *not* the independent events that earlier accounts suggest. Like the other major money centers, the banks of New Orleans suspended payments with knowledge of the growing panic in New York.⁵²

Once individuals withdrew specie from the banks, they held it for several months. As noted

⁵⁰ Martin, *Seventy-Three Years*, p. 30.

⁵¹ It generally took seven days for the express mail from New York to reach New Orleans in the Spring of 1837, arriving by steamship around noon of each day (the May 10, 1837 edition of the *New Orleans Daily Picayune*, among others, contains the mail arrangement). The May 13 edition of the *Picayune*, which was a morning paper, discussed the Mechanics' run based upon an article in the May 5 edition of the *New York Herald*. This means that news of the run had reached New Orleans around noon on May 12. The *Picayune* had already reported the death of the Mechanics' president, which had occurred early on the morning of the 4th, in its May 12 issue, so the earliest news of the May 4 run may have even reached New Orleans on May 11.

⁵² The chronology of the first bank suspensions by city as reported in regional newspapers is as follows: Natchez, May 4; New York City, May 10; Philadelphia, Baltimore, and the principal cities of Connecticut, New Jersey and Rhode Island, May 11; Boston and Washington, May 12; New Orleans and Norfolk, May 13; Cincinnati, May 17; Charleston, May 18. All but New Orleans and Natchez explicitly cite arrival of news from New York as the reason for suspension.

in Section I, the public already held more than 40 percent of the nation's specie stock in August of 1836, and Table 2 shows the deposit banks sustaining a net loss of \$2.5 million in specie between August 1, 1836 and July 1, 1837. Thus, if every person living in the United States at the time added 16 cents to their specie holdings in anticipation of the crisis, this could account completely for the decline in reserves. Rutner's estimates of specie in the hands of individuals are consistent with this, showing an increase of \$5.9 million between January and June of 1837.⁵³ Since the nation had net specie imports of only \$1.2 million between December of 1836 and September of 1837,⁵⁴ it is unlikely that a significant amount of the missing specie made a brief round-trip journey to England.

INTERNATIONAL ASPECTS OF THE PANIC

Disturbances from across the Atlantic in April of 1837 aggravated the monetary pressure in the Eastern cities and hastened the coming of the panic. Most serious was a renewed series of commercial bill rejections in England, though on this occasion the Bank of England took action to support many houses involved in the American trade. News of the intervention reached New York in the first days of May and eased some of the tension in that city by making merchants and bankers more confident that specie exports would not become immediately necessary.⁵⁵ By this time, however, the increasingly apparent effects of domestic monetary policies had already sown the seeds of panic, and a crisis could no longer be averted. International events played a contributing but secondary role in the panic.

⁵³ Rutner, *Money*, p. 151.

⁵⁴ Rutner, *Money*, p. 207.

⁵⁵ For example, the May 6, 1837 edition of *Niles' Weekly Register*, in recounting the events of the previous week, reports that "on the all absorbing question of the money market and the great houses connected with the American trade, the news is favorable and decisive.— There is no longer any doubt we think that those houses will be sustained at all events. It also appears that the credit opened by the Bank of England to the United States Bank would not require, as has been said and repeated here, any present or immediate export of specie from this side."

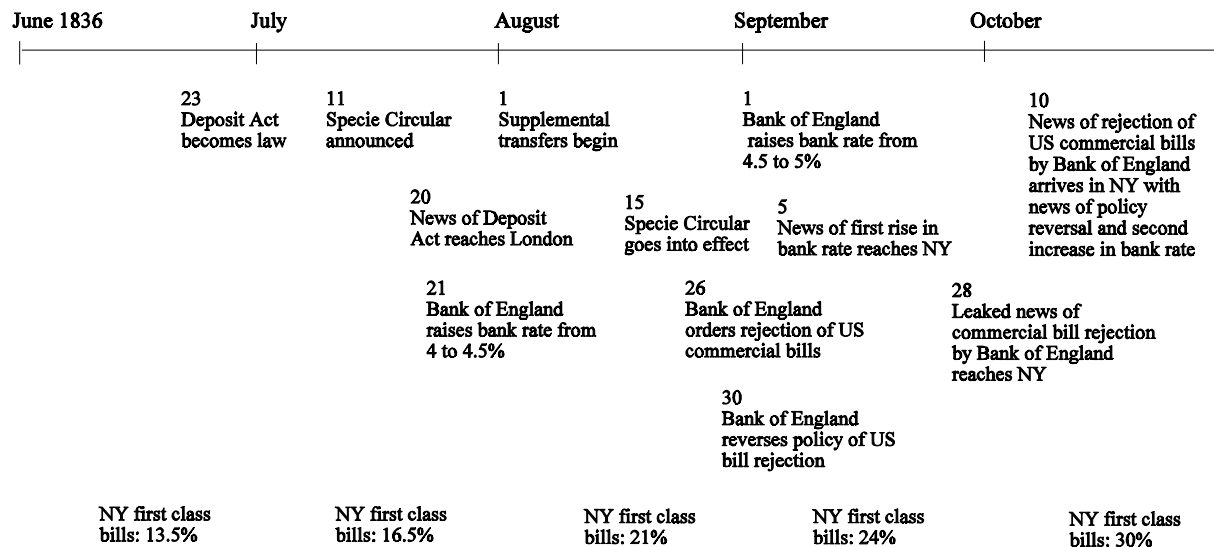


Figure 4.– Events Surrounding the Monetary Pressure in 1836.

In contrast to my emphasis on domestic factors, Temin emphasizes two increases in the Bank of England’s discount rate in the Summer of 1836 and the accompanying restrictions imposed upon merchant houses involved in the Anglo-American trade in late August as responsible for the rising monetary pressure in the United States. The evidence, however, summarized by the timeline in Figure 4, suggests that the strength of such a channel is overstated.

Contemporary accounts indicate that the Bank’s first increase in its rate of commercial discount .in fifteen years from 4 to 4 ½ % on July 21, 1836 was expected (the Bank had raised the rate on temporary loans from 3 ½ to 4% only a few months earlier) and raised little concern in the British money market.⁵⁶ Merchant bankers even came to accept the higher rate, often exceeding their credit limits with the Bank in mid- to late August in anticipation of yet another increase.⁵⁷ Reactions in the U.S. press to this increase in the Bank rate or to a second advance to 5 percent for all

⁵⁶ *London Times*, July 25, 1836.

⁵⁷ *London Times*, August 26, 1836.

accommodations on September 1 are scarce. *Niles' Weekly Register* does not mention either increase. The *New York Herald* reports on September 6 -- one day after the packet ship with information of the first increase entered port -- that "the advance created some pressure across the water that may reach this country through the exchanges."⁵⁸ It does not mention this change again. More importantly, the timing (see Figure 4) suggests that actions by the Bank of England could not have caused the monetary pressure that had existed in New York for months.

On August 26, 1836, the Bank of England ordered a rejection of bills submitted for discounts by several first-rate Anglo-American mercantile houses at both its London office and Liverpool branches. Ralph W. Hidy views these rejections as part of a heightened offensive against the U.S. trade.⁵⁹ The historical record, however, describes a brief incident with limited long-term impact. In fact, the Bank had imposed such restrictions once before in late 1834 with no effect on the course of trade or the condition of the U.S. money market. Further, criticism of the policy in the *London Times* by merchant bankers and the financial community was universal and intense.⁶⁰ When it became known to directors of the Bank of Liverpool that a campaign had been launched by the Bank, they sent a deputation to meet with the Bank's directors in London on August 30 and question their motives.⁶¹ Recognizing their blunder, and under increasing pressure in the press, the Bank

⁵⁸ A list of departure and arrival dates for all packet ships on the London line between Portsmouth and New York for the year ending in October, 1836 appears in the January 7, 1837 edition of the *London Times*.

⁵⁹ Hidy, *House of Baring*.

⁶⁰ See, for example, *London Times*, September 10, 1836.

⁶¹ "The fact is, that they (the deputation) had received an impression that the Bank Directors intended to place under an absolute stigma, as to credit, seven of the most eminent houses in London, no possible motive for which could at the same time present itself to their minds. It arose in this way: -- The Bank Directors, on the day when they created such general consternation in the commercial world by throwing out the bills of the houses in question, naturally reflected that they had branches in Liverpool and in Manchester, where the same bills might be presented, and if they were, that they would certainly be discounted. Letters were, therefore, dispatched to the managers of those branches, with instructions not to discount any bills on which the names of any of those firms

directors agreed to reverse their policy.⁶²

The rejections of commercial bills of the American houses in August of 1836 may have generated brief uncertainty in the U.S. money market in early October, but only because a director of the Bank secretly warned one of the affected houses (Wiggins & Co.) of the intended policy in early August -- three weeks in advance of the rejections. The leak finally reached the United States and appeared in the *New York Herald* on September 28. It took until October 10 for a packet ship with news of the actual rejections and the subsequent policy reversal to arrive. News of the second increase in the Bank rate arrived at the same time. Surprisingly little concern was raised in New York by the events. Indeed, the rise in the Bank rate was dismissed as a signal of England's own excesses in stock and land speculations. The lack of concern is understandable. The troubles of the U.S. money market in late 1836 were due primarily to distortions of *domestic* origin, and *not* actions by the directors of the Bank of England that had commenced in the Summer.

CONCLUSION

The Panic of 1837 was the culmination of a series of policy shifts and unanticipated disturbances that shook the young U.S. economy at the core of its financial structure -- the banks of New York City. Over the nine months leading up to the crisis, the specie reserves of these banks

appeared which they had already placed under an interdict in London. How the secret oozed out it is difficult to say." (*London Times*, September 5, 1836).

⁶² "With regard to the Liverpool and Manchester bills, founded on the export trade to the United States, which were so recklessly thrown out last week, to the astonishment of the whole trading interest, who knew the perfect solidity of them, a sort of compromise appears to have been come to. After a full discussion (with the Bank Directors) of all the points at issue, they (the members of the deputation) were given to understand that no obstacle would be thrown in the way of discounting American bills arising out of fair business transactions, though a wish was expressed on the part of the Bank to check such foreign stock transactions as would have a tendency to drain the country of specie. Between these and the legitimate transactions of commerce the Bank Directors, if they understood their business, should always be able to distinguish; and such a declaration was therefore quite superfluous" (*London Times*, September 2, 1836).

came under increasing strain as they reacted to legislation designed to achieve a “political” distribution of the surplus balances among the states and an executive order allegedly aimed at ending speculation in the public lands. With much of the nation’s specie diverted from its commercial center, the prospects of shifts in specie demand both domestically and from abroad combined to render the panic inevitable.

This description reaffirms one important aspect of the traditional view, namely that the Specie Circular was pivotal. Had the circular not been enacted, the original set of transfers ordered by the Treasury, both official and supplemental, could have been executed as planned. And though this account argues that the orders were far more disruptive than earlier explanations of the panic have presumed, the New York banks had time to prepare for them. It was the Specie Circular that exacerbated the drain of specie from New York to fuel the continued sales of public lands, and even forced a frantic attempt by the Treasury to alter the orders to redirect specie from West to East late in the Fall of 1836. When the noose tightened around the New York money market just as the huge transfers scheduled for early 1837 came due, the only remedy that remained in the eyes of the public was a repeal of the Specie Circular. President Van Buren’s refusal to reverse his predecessor’s policy upon inauguration in March of 1837, despite the passage of legislation by both Houses of Congress, hastened the shift in expectations. International factors added pressure to an already volatile situation by late April and early May, but any demands for specie from abroad would have been absorbed by a New York money market that had not been subjected to such a severe internal drain.

The panic differs from later U.S. financial crises in that a drain of reserves from New York was central as opposed to a drain from the interior to the commercial centers. In particular, the event illustrates that the nation has always been vulnerable to shifts in the geographical distribution of the reserve base, regardless of their source. In 1836-37, a monetary policy reinforced the permanence of

such unfavorable and unexpected shifts from New York and heightened the public's liquidity preference. Suspensions in the interior were largely precautionary.

The crisis highlights several key weaknesses of the antebellum banking system. First, if a branch banking system had been in place, much of the movement of balances associated with the distribution would not have required specie. Second, even if specie had moved South and West, a mechanism for bringing it back to New York would have been in place for use during times of financial stress. Finally, the demise of the Second Bank of the United States at the hands of the Jackson administration left the nation without a lender of last resort to sustain New York's reserves as the public began to lose confidence.

The most interesting lessons, however, concern the conduct of monetary policy. In particular, today's decision makers are faced with a limited menu of tools for achieving monetary objectives, just as were President Jackson and Secretary Woodbury. These men used the tools at their disposal to end a speculative boom in public lands, yet the Specie Circular had the unanticipated effect of drawing the nation's specie away from its commercial center. It is the possibility of such unexpected general equilibrium effects in today's policy environment that make thorough analysis and a flexible approach to monetary fine-tuning all critical for averting the types of crises that can arrest economic growth.

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