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BOOK REVIEW

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The many lessons of *The Man Who Knew*

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THE MAN WHO KNEW——THE LIFE AND TIMES OF ALAN GREENSPAN
Sebastian Mallaby
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Sebastian Mallaby ambitiously sets out to accomplish three tasks in one book. He draws a portrait of Alan Greenspan the man. He chronicles more than half a century of history and Greenspan's corresponding career as a private analyst and public servant. He also offers a lesson for future central bankers on the importance of giving sufficient weight to financial stability, not just price stability, in setting interest rates.

The Man Who Knew is an impressive achievement and an important piece of scholarship that both deserves and rewards the careful reader. The footnotes alone are worthy of their own treatment, containing not only citations to Mallaby's extensive primary research and interviews but also a running subtext of Mallaby's commentary on Greenspan and on much of the relevant economic literature.

The reviewer is daunted, left mostly to quibble over emphasis and inference.

The portrait is finely drawn, one many of us will both recognize and learn from. The chronicle is a brilliant rendering of key moments in recent economic and financial history that provides the context needed to appreciate Greenspan's extraordinary mixed legacy. Mallaby's lesson is an important one but his focus is more on the morality tale of Greenspan ignoring his own youthful insights and not enough on why and how central banks can actually apply Greenspan's insights and Mallaby's lesson. Fortunately for us, *The Man Who Knew* provides many more important insights than Mallaby could possibly choose to highlight. Future central bankers ignore Mallaby's volume at their peril.

1 | GREENSPAN THE MAN

Mallaby's portrait presents Greenspan as a man of complexity and contradictions, at times sphinxlike and at others disarmingly candid. He is capable of indecipherable utterances and of a famous 'bedside manner' that charms and beguiles.[1] He works with both jazz legend Stan Getz and disgraced President Richard Nixon.[2] He is an intensely private man who becomes the most famous and powerful economist on the planet.

Mallaby also lets us see an intensely political Greenspan, spinning and flattering reporters and congressmen.[3] We see Greenspan working on Richard Nixon's 1968 presidential campaign, besting Henry Kissinger at bureaucratic combat in the Ford administration and escaping with his fiscal and forecasting virtues mostly unscathed from entanglements with President-elect Reagan's true-believing

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supply-siders.[4] As Greenspan learns the ways of Washington, he becomes adept at the use of proxies as his instruments, the better not to leave his own fingerprints.[5] The biographer ultimately judges Greenspan, the political actor, to be 'a sort of manipulative genius'.[6]

Recognition that Greenspan is adept at using others as instruments and proxies raises the awkward question of whether he may have used his biographer in this way, whether we are observing Mallaby's portrait or, at times, something more like a self-portrait by Greenspan himself.

We learn that, as a boy, young Alan dreamed of playing at Yankee stadium, foreshadowing the ambition that would take him to the heights of power and fame.[7] But are there not legions of boys who dream of baseball greatness who never leave a mark on history? Would we believe that there are many that do leave their mark who lacked ambition in their youth? This seems to be a bit of hindsight bias. But is it the biographer's or the subject's?

On the defining moments in Greenspan's career and the big lessons that he seeks to draw, I have no doubt that Mallaby reaches his own considered conclusions from his meticulous research. But particularly with respect to Greenspan's interior—his motives and intentions and the subtle lines that Mallaby draws in Greenspan's character—it is hard not to wonder whether Mallaby accepts a bit too much of what Greenspan told him in their extensive interviews.

We read that during his tenure as chairman of President Ford's Council of Economic Advisors, Greenspan 'had relatively little need to feel that others approved of him, so he did not take offence if his advice was disregarded'.[8] Really, is it that simple? The man who was appointed and reappointed Fed chairman by four Presidents, to stay atop the slippery pole of power for 18 years, had little need to feel that others approved of him? Is this how Greenspan wants to be recalled or the biographer's thoughtful assessment?

Mallaby's preface is candid about the importance of his more than 70 hr of recorded interviews with Greenspan.[9] Reflecting on this same episode in the Ford Administration, Mallaby leaves open the possibility that Greenspan's political instincts and desire to be a 'popular team player' may have led him to be gracious when his advice was disregarded and that, perhaps, this posture helped him accumulate power.[10] So was Greenspan really indifferent to the approval of others, as the narrator tells us, or did he crave it and crave the power that followed from acceptance and approval?

Mallaby is at his best when he allows the reader to ponder different interpretations of Greenspan's motives. Was it the 'loner psychology' of the only son, deserted by his father and doted on by his mother, that at times produced a passivity and fatalism seemingly at odds with Greenspan's intellectual powers? Was Greenspan pursuing the politically expedient path of least resistance? Or did Greenspan's various acts and omissions reflect a keen mind and worldly wisdom focused on producing the better outcome for the public good? Taken as a whole, Mallaby's Greenspan is too complicated, too contradictory, too political an animal to allow for any simple, one-dimensional explanation of his motives.

Indeed, the contradictions and tensions within Mallaby's Greenspan are what make this a great portrait. Greenspan the business consultant is both a data-driven pragmatist and a devotee of Ayn Rand and her radical laissez-faire philosophy. He is the young man who thought that the creation of the Fed was a historic mistake and the older man who became the Fed's maestro. He is 'the man who knew'—knew the facts, knew the analysis and ultimately knew that central banks had to lean against asset bubbles. He is also the man who knew what he did not know, who—at the height of his powers and perhaps because of those powers—was comfortable admitting that 'we really do not know' how the monetary system works.[11]

2 | GREENSPAN'S LEGACY IN CONTEXT

Mallaby's greatest service is to have chronicled Greenspan's career and the history it spanned in sufficient detail to help the reader see past the graffiti that has defaced Greenspan's actual and subtle legacy.

Greenspan has been widely lampooned by market pundits and journalists for always going soft in the face of market volatility, offering investors the comfort of easing monetary policy whenever their losses mount via the so-called 'Greenspan Put'. In the collective consciousness, Greenspan's lowering of interest rates after the stock market 'break' of 1987, after the Russian debt default and Long-Term Capital Management crisis of 1998 and after the dotcom bubble burst in 2000 are seen as proof of Greenspan's asymmetric bias in favour of investors.

Mallaby's research reveals that others inside the Federal Reserve were bigger enthusiasts for uttering the comforting words to soothe stock market declines in the late-1980s.[12] Mallaby's narrative reminds us that in 1990 there was no comforting easing of policy for either Drexel Burnham Lambert or the entire savings and loan industry.[13] Nor in 1994 was there a Greenspan Put, of an easing of interest rates, in response to the turmoil in global bond markets.[14] Thus, over his career, Greenspan actions were much more symmetric in their impact on financial asset prices than market observers choose to recall and more symmetric than his successors have been.

Mallaby also usefully muddies the view that Greenspan was a one-dimensional, ideological de-regulator, always putting his finger on the scale of less regulation. That he did behave this way on a number of occasions is plain, significantly with respect to bringing down the Glass–Steagall barrier preventing banks from underwriting securities and in avoiding regulation of over-the-counter derivative markets.[15] But in other instances Mallaby's Greenspan backs firmer regulation in the post-Enron accounting reforms, in trying to restrain the government-sponsored housing agencies Fannie Mae and Freddie Mac, in early efforts to clamp down on abusive mortgage lending and in seeking to expand the Fed's regulatory authority over financial companies.[16]

Mallaby carefully documents Greenspan's long and impressive record of financial and economic insights. We learn of Greenspan's early understanding of the nexus between stock market valuation and business fixed investment, anticipating the Nobel-prize winning work of Yale economist James Tobin.[17] We also get to peek into Greenspan's writings that document the inflationary bias of the tightly regulated economy of the 1950s and 1960s, as well as his early understanding of the connection between housing finance and monetary policy.[18]

Most admired among Greenspan's insights was his 'productivity call' in the late 1990s, when he gleaned from the data an acceleration of productivity that no one else saw. In this instance, Greenspan had not only the analytic insight but also the courage of his conviction and virtually unconstrained sway over the Fed's policy, allowing him to resist the views of other policy makers and let the US economy 'run hot' while millions of Americans gained employment without appreciable inflationary pressures.[19]

Sadly balancing this accomplishment, Mallaby uncovers a role that Greenspan played in President Nixon's efforts to corral Fed Chairman Arthur Burns.[20] Recognition that Greenspan obliquely contributed to the infamous inflationary consequences of the Fed letting the economy 'run hot' to support Nixon's re-election campaign puts both Greenspan and the inflation of the 1970s in a very different light.

As we traverse Greenspan's pre-Fed career, Mallaby treats us to the running debate on the causes of inflation. Was it bottlenecks in a rigid economy? Was it fiscal deficits, either in the form of too much government spending or too much debt? Was it too much money? The young Greenspan evolves from a monetarist to seeing inflation as a 'state of mind' of expectations about entitlements,[21] and then sagely

explaining, at his initial confirmation hearing, that money growth may explain inflation in the long run but is no guide to price stability in the short run.[22]

Later on Mallaby introduces the new generation of 'inflation targeters' and brings to life the debates inside the Fed when Greenspan was nearly cornered into agreeing to a 2% inflation target without first specifying which measure of inflation was to be the reference.[23] This is both great theatre and sheds light on the lack of analytic rigor in the origin of the 2% target.

3 | GREENSPAN AND MALLABY ON ASSET BUBBLES

The lesson and moral that Mallaby wants to draw is that central bankers should consider asset prices and financial stability, not just price stability, when setting interest rates. In Mallaby's view, Greenspan's failure to shift his attention from inflation to financial fragility was his 'most consequential error'.[24]

But the careful research and eloquent narrative that sustain the chronicle of Greenspan's life and times complicate Mallaby's task, making it harder—not easier—to resolve the riddle of why Greenspan seems to have ignored the risks to financial stability during his last years as Fed Chairman. If Greenspan 'knew' that financial stability mattered, if he was capable of being tough on the markets, if he was no longer ideologically laissez-faire in his views on regulation but more pragmatic, why *did* he seemingly ignore the housing bubble that led to the financial crisis?

Greenspan's early writing and speeches, and the transcripts of the Fed meetings when Greenspan was in the chair, document Greenspan's long record of interest and insight into asset bubbles and the wealth effect. Mallaby marshals this evidence, as if in a legal brief, to prove that Greenspan was the man who knew the importance of financial stability but failed to act on his knowledge.

In a 1959 paper delivered to a meeting of the American Statistical Association, Greenspan analysed the connection between asset prices, on the one hand, and investment and consumption on the other, anticipating by decades our current understanding of the 'wealth effect'. Greenspan argued that the Fed had erred in underestimating its own contribution to the run up of the stock market in the 1920s and argued that central banks need to use interest rates to modulate asset prices if they are to be effective in smoothing out the peaks and troughs of the business cycle.[25]

Mallaby observes, with regret, as Greenspan evolves away from these youthful insights, becoming a chairman who expresses concerns about asset bubbles but who ultimately adopts a three-step explanation of why central banks should not raise interest rates to combat asset bubbles. As summarized by Mallaby, Greenspan concludes that (1) bubbles are impossible to identify in advance; (2) the debris from burst bubbles can be cleaned up after the fact; and (3) interest rates would have to be raised by such a large amount that they would puncture the economy.[26] Mallaby is unconvinced, noting that Greenspan had no hesitation in diagnosing asset bubbles at Fed meetings, that clean-up operations in the 21st century have been neither reliable nor cost-free, and that the assertion that raising interest rates enough to combat asset bubbles would necessarily cripple the economy is 'merely' an assertion, not a proof.[27]

Both Greenspan and Mallaby could have applied more of their considerable analytic powers to distinguish the causes and consequences of different types of asset price increases and avoid the gloss of 'bubbles'. Whether increases in equity prices are likely to be unsustainable is hard to discern and really only evident at extreme price-earnings ratios, as the chronicle explains.[28] But 'credit bubbles' are a different matter. There is nothing subtle about money being lent to those who cannot repay it other than from the further momentum in asset prices. And because of the nexus between money and credit, the consequences for the financial system of a reversal are much harsher. Had Greenspan and his

successor worked harder to discern the degradation of credit in the housing bubble, and its likely threat to the financial system, history might have been different. Had Mallaby done so, his lesson for central bankers would be more useful.

Mallaby also documents a parallel journey, but in reverse, from the young Greenspan who naively opposed and abhorred government bailouts to the older, wiser Greenspan who accepted not only the necessity of both fiscal and monetary bailouts but came to see their wisdom. The younger Greenspan denounced the creation of the Fed and its lender-of-last-resort function as 'one of the historic disasters of American history'.[29] The older and wiser Greenspan, seeking his first confirmation as Fed Chairman, allows that central bank actions to liquefy markets under stress are not only necessary, they are desirable.[30]

While Mallaby applauds Greenspan's mature recognition that democracies are going to demand bailouts,[31] Mallaby regrets that this appears to have permitted the older Greenspan to worry less about bubbles and financial stability.[32] This reader, at least, was struck by Mallaby's picking and choosing among Greenspan's thinking, approving the wisdom of the older Greenspan's views on bailouts but preferring the younger Greenspan's views on the use of interest rates to combat asset bubbles.

I recall an even more complicated Alan Greenspan.

I recall him explaining a slightly—but importantly—different trilogy of reasons why central banks should refrain from pricking asset bubbles: (1) because asset bubbles are hard to identify; (2) because efforts to prick a bubble may only make matters worse by releasing just enough air to allow the bubble to grow even larger; and (3) because cleaning up after the fact works well enough.

I understood—but perhaps I only assumed—that Greenspan thought of his famous 'irrational exuberance' speech in 1996 as a prominent example of the second reason—of letting just enough air out of the stock market to allow the tech bubble to grow even bigger and more dangerous. This supports Mallaby's view that identifying bubbles is not as hard as subsequently claimed by Greenspan[33] but also provides a reason to be less confident about the wisdom of trying to constrain asset price movements.

I also thought that Greenspan rather skillfully, if stealthily, did burst the technology and equity market bubbles in 2000. Mallaby is too quick to dismiss this idea.[34]

While raising rates in 1999 and early-2000 was consistent with managing a strengthening economy and consumer price inflation, it seemed to me that raising rates a further 50 basis points in the spring of 2000, after the Nasdaq had begun its sharp decline, was more akin to stomping on the stock market's throat. Holding rates firm throughout the rest of 2000 while the Nasdaq lost half its value was no Greenspan Put. Of course Greenspan did not publicly claim responsibility for this apparent act of wealth destruction.[35] But the outcome was both a significant correction in the stock market and a mild recession—likely even milder if the events of 9/11 had not intervened.

The biographer wants Greenspan to have taken action, to have *raised* interest rates—both sooner and more—to squeeze the stock market. By not having done so, Mallaby reasons that *because* of the further rise and subsequent fall of the Nasdaq 'business fixed investment collapsed by 25% in the first quarter of 2001, precisely as the young Greenspan would have predicted'.[36] Mallaby takes this as proof that Greenspan should have acted sooner.

Mallaby's critique of this episode seems to be more about timing than intent. One could also quite reasonably conclude that raising rates enough to deflate the stock market bubble had indeed 'punctured' the economy. Doing so earlier might or might not have prevented more of a run up but raising rates further would likely have punctured the economy even more. These are certainly plausible reasons to revise the trilogy and to be gun-shy about using interest rates to manage asset prices later in the decade.

In a striking cameo appearance in Mallaby's narrative, during the Fed's March 1998 meeting, Cleveland Fed President Jerry Jordan observes:

> *Our actions in early 1994, properly viewed, prevented the recession of 1996. What we are faced with today is how to prevent the next credit crunch and recession of 2000.*[37]

Mallaby describes Jordan's remark as 'prescient'.[38] But with all his emphasis on the need for central bankers to focus on financial stability not just price stability, Mallaby does not seem to recognize that it is the horizon that makes all the difference. Since 2003, the Fed has been obsessed with short-term financial market volatility, nervously fretting about a repeat of the 'bond market turmoil' of 1994. But the Fed has failed—both in Greenspan's last years and under his successors—to take account of the more profound threat to financial stability from the too-rapid growth of credit and asset prices that lies ahead in the medium term, exactly the horizon on which Jerry Jordan so wisely focused.

4 | GREENSPAN'S FINALE

So why did Greenspan, in his last years as Fed Chairman, raise rates at such a gradual, telegraphed 'measured pace' and thereby encourage the buildup of the financial excesses?[39]

Because Greenspan is the man who knew that financial stability mattered, and thus should have known better, Mallaby reaches for the unconscious explanation that something in Greenspan's upbringing and loner psychology caused a mental passivity on his part when confronting the need to raise interest rates in 2004.[40] This is both unpersuasive and unhelpful. It is unpersuasive because it cannot explain why at this particular point in his life Greenspan goes soft. It is unhelpful because first we need an explanation of why Greenspan's conscious mind made the choices that it did, which Mallaby never seems to settle on.

Mallaby chronicles the important shift, in 2003, when the Fed Funds rate was at 1% and Greenspan embraced the manipulation of expectations through forward guidance when the Fed adopted the language that rates would remain low 'for a considerable period'.

> *Given that there was a limit to how much he could cut short-term interest rates, he shifted to pulling down longer-term interest rates by guiding markets about his future policy.*[41]

Consistent with the passivity hypothesis, Mallaby identifies not Greenspan but newly appointed Fed Governor Ben Bernanke as the 'driver of this intellectual switch' and the 'prime mover of monetary policy' in Greenspan's stead.[42]

Mallaby also records the explanation discussed within the Fed, offered prior to the rate increases commencing, that they were *trying* to stimulate the interest rate sensitive sectors so the very 'financial excesses' of concern to others were the Fed's intended outcome.[43] Having put themselves on the path of still wanting to stimulate, Greenspan and his colleagues adopted the measured pace of rate increases precisely because they were not trying to restrain anything. They were trying to normalize without restraint. Not looking for financial excesses, they did not find any.

These explanations are not satisfying but, then, we have the burden of hindsight.

At the time the most persuasive explanation that I heard as to why Greenspan adopted the 'measured pace' tightening, that never really constrained credit growth and the housing bubble, was offered by investor Stanley Druckenmiller. Searching for a theory to explain Greenspan's odd behavior, Druckenmiller suggested that perhaps 'he is just trying to get out of town without blowing

the place up'.[44] Both pithy and prescient, Druckenmiller's hypothesis focuses on the importance of Greenspan's shortening horizon, as his expected retirement approached.

I agree with Mallaby that central banks should keep financial stability in the foreground of their thinking in setting interest rates. I also agree with Mallaby that during Greenspan's last years as Chairman, the Fed did not pay sufficient attention to these risks and that this omission contributed to the financial crisis and the loss of employment and output that followed. But I am not expecting Alan Greenspan in retirement to confess to this error in judgment. Greenspan is too complicated, too contradictory, and too political to agree to something so tidy and self-damning as Mallaby's morality tale.

While the post-crisis Greenspan famously admitted to a 'flaw' in his belief that bankers would attend to the interests of their own shareholders,[45] do we really expect Greenspan to acknowledge that his own acts and omissions, inconsistent with his early writings, were a significant cause of the financial crisis? I do not.

Why should central banks care about financial stability and why should they use interest rates to address their concerns? Not because young Alan Greenspan said so. But, rather, as the young Greenspan observed, because the wealth effect can amplify the business cycle in *both* directions.

Mallaby thinks Greenspan should have shifted his attention *from* price stability *to* financial stability. I do not share this view.

Central banks should care about financial stability not in opposition to price stability and their other goals but, rather, because financial instability is a *deflationary* threat to price stability and to employment and output growth. The challenge is to recognize that easy monetary conditions may stimulate demand in the short term but, particularly in excess, can also create the conditions that will eventually cause *deflationary* pressures from falling asset prices and financial instability.[46]

The Fed of 2003–2006 was concerned about the threat to its price stability and employment objectives from weak demand. Encouraging an expansion of mortgage credit and auto loans, pumping up house prices and auto sales, were desirable means of strengthening demand. They did not pay enough attention to the second-order consequences for financial stability of rapid credit growth and elevated asset prices as posing deflationary threats to price stability and employment—as we found out in 2007 and 2008. But whether Greenspan's most consequential mistake was ignoring asset prices and financial stability, as Mallaby concludes, or whether it was agreeing in the first instance to the forward guidance of the 'measured pace' interest rate increases is a close call for me.[47]

Mallaby reports on the debate between 'rules and discretion' in monetary policy but fails to ascribe any significance to this in his analysis of Greenspan's mistake. Indeed, Mallaby chooses to celebrate Greenspan as the activist central banker who is mostly successful in deploying his discretionary powers over interest rates to steer the economy.

But prior to 2003, under Greenspan, the Fed's deviations from the path of short-term rates suggested by the Taylor Rule—the most celebrated monetary policy rule—were minor compared to what followed. Mallaby's critique of Greenspan centres on his raising interest rates too slowly after 2002 and this is also precisely when adherents of more rules-based policies, such as both Stanford's John Taylor and the late Anna Schwartz, would point to the Fed having gone astray. So while Mallaby the chronicler is careful to record the views of Taylor and Schwartz as supporting his own identification of Greenspan's mistake,[48] in framing his lesson Mallaby does not acknowledge what this implies for future central bank policy.

Mallaby rehearses the many arguments about why regulatory tools will be inadequate to the task of ensuring financial stability[49] but on the last page of his book he silently offers a compelling reason why the Fed, at least, needs to use interest rates.

In his Annex, Mallaby presents several charts, the last of which shows the growth of shadow banking liabilities in the United States from 1971 to 2015.[50] The spectacular rise of shadow banking serves as a crude but effective index of the US political economy with respect to our inability to contain credit growth inside the perimeter of the regulated banking industry. By definition, regulatory tools will be ineffective at constraining the growth of credit beyond the regulatory boundary. Properly understood, Mallaby's final chart should caution anyone from imagining that the job of containing a too-rapid growth of credit in the United States can be effectively done with any tool other than interest rates.

5 | THE MAESTRO OF INTEREST RATES OR THE BLIND ROLLER SKATER OF REGULATION?

Mallaby presents his conclusions in a final chapter entitled 'The blind roller skater'—a reference to the scene in the film *Modern Times* when Charlie Chaplin puts on roller skates and, blindfolded, swirls about oblivious to his proximity to danger. While allowing that Greenspan's powers of analytic insight were formidable, Mallaby judges Greenspan as a 'doer' more critically and judges him most harshly—as the blind roller skater—for his failure to make the pivot to address financial stability. But then Mallaby softens the blow, observing that 'the collective nature of this error should at least be recognized' as Greenspan had plenty of company.[51]

Ultimately Mallaby draws a distinction between Greenspan's role in regulation and supervision, where he was constrained by others and other institutions and, thus, bears limited responsibility, and his role in setting short-term interest rates where Greenspan's powers were unconstrained and, thus, 'with great power comes great responsibility'.[52]

I appreciate that Greenspan is a man of contradictions but this contrast is too sharp, too hard to grasp. Perhaps Greenspan wants to be thought of as the maestro but the biographer is worried that he might have been more of a blind roller skater, more lucky than careful. Despite Mallaby's celebration of Greenspan as the discretionary, activist central banker, it is not clear that Mallaby thinks it a good idea for monetary policy to be so dominated by a single individual.

Mallaby recognizes that the great man theory of history can be a trap for the biographer and one he wants to avoid.[53] But it is hard not to put the subject of a biography at the center of the story and harder yet to draw lessons other than from the subject's life.

On the last page of Mallaby's Annex is another chart, on the 'leveraging' of America, depicting the rise of household and non-financial business debt as shares of US GDP from 1971 to 2015, much of it occurring during Greenspan's tenure as Chairman.[54] Studying this chart, it occurred to me that Robert Gordon's comprehensive study of productivity in the US economy, *The Rise and Fall of American Growth*, dates the end of the century-long surge in US productivity growth to exactly the starting point of Mallaby's debt-to-GDP chart.[55] With enough perspective, perhaps history will come to see Greenspan as neither maestro nor Charlie Chaplin but simply as a mostly effective enabler of our using rising levels of indebtedness to maintain the illusion of rapidly rising standards of living.

6 | THE MANY LESSONS OF '*THE MAN WHO KNEW*'

Mallaby's competing roles as biographer, interviewer, historian, and moralist complicate his conclusions. The biographer wants to understand why Greenspan adopted the timid firming of monetary policy from 2003 onwards. The interviewer and journalist want to extract the confession from the retired Greenspan that he should have listened to the youthful Greenspan's insights. The

historian wants to explain why, in the future, central banks should address financial stability concerns with interest rates. The moralist seems intent on revealing that Greenspan failed to live by the dictum of Polonius: ‘to thine own self be true’.[56]

To his considerable credit, Mallaby’s chronicle displays many important episodes of recent history that suggest a number of other lessons that policy makers ignore at their peril. I have highlighted only a few: more humility and more thought about the particular causes and consequences of both inflation and asset price movements, focus on the medium term and the usefulness of maintaining rules or guidelines as checks on cognitive bias and analytic hubris.

Another lesson—for future biographers and for us all—is to be careful in ascribing motives and intentions to anyone and particularly to someone as complicated, as contradictory, and as political as Alan Greenspan.

At a meeting in Basel, Switzerland, of the G-10 central bank Governors in the mid-1990s, where I was seated in the back row taking notes, I recall each Governor being asked to give their views on the workings of the monetary policy transmission mechanism and, in particular, whether it had changed in any way. One by one, around the table, the Governors droned on and on, testing the handwriting and the endurance of the note taker. Each Governor, in turn, explained in great detail that they knew just how the transmission mechanism worked and that it worked just the way it always had. When it came to Greenspan’s turn he simply said: ‘The monetary transmission mechanism is always changing and we understand it only imperfectly’ and then he stopped.

This is the Greenspan I experienced, capable of expressing insight, humility, and arrogance all in a single breath and still not telling us anything in particular about what he is thinking.

That Mallaby does not quite prove his lesson, and is too focused on extracting a confession, are indeed only quibbles. *The Man Who Knew* is a great portrait and chronicle of the life and times of Alan Greenspan. Mallaby’s book will be the starting point for future scholarship on Alan Greenspan and—quibbles notwithstanding—should be the starting point for those who aspire not to repeat the mistakes of our recent past.

Like one of the haunting portraits by the Dutch Masters, we see so many life-like details of the man’s face and eyes that we think we know something of his interior state of mind. But a mere portrait cannot really give us access to the man’s inner thoughts, nor allow us to reconcile his many contradictions.

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ENDNOTES

1 Mallaby, 2016a, pp. 485, 169.

2 Ibid., pp. 21, 101–127.

3 Ibid., pp. 215, 677.

4 Ibid., pp. 101–127, 188–194, 254.

5 Ibid., pp. 258, 259.

6 Ibid., pp. 677.

7 Ibid., pp. 18, 19, 327.

[8] Ibid., pp. 167.

[9] Ibid., p. xi.

[10] Ibid., p. 167.

[11] Mallaby, quote from the front piece, 'The bottom line is that we really do not know how this system works.'—Alan Greenspan on the Fed's operation of monetary policy, 1999.

[12] Mallaby, 2016a, pp. 340–359.

[13] Ibid., pp. 388, 389.

[14] Greenspan did support the US Treasury rescue package for Mexico, as Mallaby documents (pp. 472, 473). This fiscal rescue of the Mexican government certainly aided investors in the infamous 'tesobonos' (peso-denominated but dollar-indexed obligations of the Mexican government). The fact of the Treasury's 'bailout' of Mexico made it easier for Greenspan and the Fed to maintain a higher level of interest rates, offering little relief to investors in US Treasury securities and other G-10 sovereign bonds.

[15] Mallaby, 2016a, pp. 312–314, 530–535.

[16] Ibid., pp. 598, 599, 626–630, 404–410, 678.

[17] Ibid., p. 49.

[18] Ibid., pp. 87, 88, 107, 147, 218–220.

[19] Ibid., pp. 491–498. Mallaby observes that, even with the brilliance of Greenspan's productivity call, it does not necessarily follow that the monetary policy was correct, given the 'reasonable case' that rates could have been higher in 1997–98 (ibid., p. 597).

[20] Ibid., pp. 141–144.

[21] Ibid., pp. 87, 107, 154.

[22] Ibid., p. 321.

[23] Ibid., pp. 487–491.

[24] Ibid., p. 684.

[25] Ibid., pp. 49–52.

[26] Ibid., p. 681.

[27] Ibid., p. 681.

[28] Ibid., pp. 432, 553–555, 634.

[29] Ibid., p. 303.

[30] Ibid., p. 361.

[31] Ibid., p. 200 and especially footnote 83.

[32] Ibid., p. 363.

[33] Ibid., p. 681.

[34] Ibid., p. 506 and especially footnote 60.

[35] Ibid., p. 506 and also footnote 61.

[36] Ibid., p. 581.

[37] Ibid., p. 524.

[38] Ibid., p. 524.

[39] Former Fed Chairman Bernanke contests the view that the 2004–06 interest rate increases were too slow or timid or contributed to the buildup of financial excesses, blogging that this tightening cycle was 'arguably' the most aggressive since the early-1980s. See Bernanke (2016). Both in his text (p. 636) and in a responsive blog, Mallaby points to the dramatic impact of the 'measured pace' tightening on risk-adjusted returns and, thus, the Fed's forward guidance blunted the effect that the Fed's interest rates increases might have had. See Mallaby (2016b).

[40] Mallaby, 2016a, p. 678.

[41] Ibid., p. 611.

[42] Ibid., p. 611.

[43] Ibid., p. 635.

[44] Recollection of Fisher, confirmed with Druckenmiller via email, 1 December 2016.

[45] Mallaby, 2016a, pp. 648–671.

[46] Fisher (2016).

[47] See Mallaby's description of the eerie calm in markets that appears to have been a consequence of the Fed's measured rate increases. Mallaby, 2016a, p. 636.

[48] Ibid., pp. 597, 655.

[49] Ibid., pp. 630–634.

[50] Ibid., p. 694.

[51] Ibid., p. 675.

[52] Ibid., pp. 680, 684.

[53] Ibid., p. 673.

[54] Ibid., p. 694.

[55] Gordon, 2016, pp. 1–8, 522–531.

[56] Shakespeare, *Hamlet,* 1.3, 78.

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