The financing and strategic deal-making landscape of the pharmaceutical industry went through a major shock in 2008-2009. Deal activity has suffered, limiting the options of development stage companies. However, when licensing deals have been struck, their values have surpassed those of the previous years, proving the strong and intensifying need for quality innovation in the face of higher risk aversion. While waiting for the capital markets and venture capital wallets to open up, pipelines, resource prioritisation and creativity in deal-making have been the keys for survival.

Collaborative and acquisition deals are essential business platforms for innovation and growth. The recognition of this reality among leading companies is now so strong that business development and alliance management have been placed at the core of the corporate strategy agenda, and increasing amounts of resources are allocated to finding and capturing the right assets. In fact, about 40 per cent of pipeline product candidates now come from external sources, and a comparable proportion of sales in the markets are driven by in-licensed or acquired technologies. On the other hand, over half of current prescription sales are exposed to generic competition within the next five years due to patent expiries, generating immense competition for attractive innovation assets.

The biotechnology sector is the source of the vast majority of innovation, but most of this never makes it to the market due to high technology and regulatory hurdles. The development risks and financing needs are monumental, making investors – financial and strategic alike – wary of big promises made by development-stage companies. This sentiment has been compounded by the recent credit crunch, which has reduced the confidence of venture capital and starved immature biotechs of research funding. In this environment, most early-stage companies have been forced to re-prioritise their pipeline assets and even shelve riskier programmes, slowing the progression of these pipelines.
and therefore diminishing the attractiveness of the involved assets for licensing. The financial crisis, however, is not the cause of these trends; it has merely deepened the issues.

**TRENDS IN COLLABORATIVE DEAL-MAKING**

Research collaborations, with or without sharing intellectual property rights in the form of licensing agreements, are proven tools of risk sharing. Yet partnering involves significant mobilisation of strategic and financial resources. Especially in licensing agreements, the financial commitments can be particularly high. Even the largest companies have only limited resources and need to make calculated bets. The painful reality of the current markets is that growth has slowed, making commercial-stage companies more careful with their cash and putting pressure on deals. Assets with low differentiation and high risks are avoided, while those with robust therapeutic proposition and reduced risks face strong interest from potential licensees. These drivers have resulted in a dramatic reduction in the number of collaborative deals. Analysis by PharmaVentures from the PharmaDeals® database shows a drop of over one third in the number of collaborative deals since the peak of 2005-6 (see Figure 1).

It is important to emphasise again that the downward trend started before the financial crisis. The earlier boom years were bolstered by the rapidly expanding business development teams and deal activities of most pharmaceutical companies, driven by the external opportunities to grow product pipelines without having to increase the internal R&D infrastructure. The recent drop following the heady days of deal-making may be a market correction due to the lack of suitable licensing candidates and improved risk assessment practices – rather than a long-term trend of reduced interest by commercialising companies.

Fewer deals, more partner scrutiny of the assets on offer and higher competition for attractive products; this is the fundamental character of the deal-making landscape now and is likely to remain so for the next decade. Those deals that are accomplished, however, are more valuable. The PharmaDeals financial figures show a substantial growth in individual deal valuations, and this is visible across all phases of product development (see Figure 2).

For every successful, high value deal, many more fail – often due to disagreements about the quality of the clinical data and the perceived achievement of
development. It is important to remember this fact when setting expectations for licensing interest and fees based on the above figures. Successful licensing deals and advancement of the involved asset in the pipeline can reward biotech companies generously. In 2000, less than 10 per cent of all licensing deals with published financial figures promised more than $100 million in upfront and milestone payments. In 2009, the proportion of high-value agreements (more than $100 million in total headline value) jumped to over 70 per cent and collaborative deals worth over $1 billion are not inconceivable (see Table 1).

While total headline values – consisting of upfront and development milestone payments – have increased, the majority of this boost is due to the licensees’ readiness to promise more after development successes. In absolute terms, upfront payments have increased by 57 per cent over the past decade; however, milestone payments have shown an even faster increase (see Figure 3, page 25).

**TRENDS IN MERGERS & ACQUISITIONS**

The large acquisitions of 2009 by Merck (of Schering-Plough), Pfizer (of Wyeth) and Roche (of Genentech in full) with a total value of $156 billion drove the perception of an active M&A market. Combined with clear evidence of the biotechnology sector starving of investment in the financing drought, most industry analysts were led to believe at the beginning of 2009 that increasing numbers of acquisitions would occur at lowered valuations. In fact, the trends show somewhat different figures. M&A deal numbers were relatively steady in the years prior to 2008. In 2008 to 2009, however, the total number of deals dropped in line with other industries’ recent experience. By eliminating the distorting values of the three above-mentioned largest deals, valuations have also dropped (see Figure 4).

**THE IPO MARKET**

Following the market crash after the demise of Lehman Brothers, the public markets have lost confidence in the risky stocks of biotechnology companies and the Initial Public Offering (IPO) window was shut tight for the two first quarters of 2009 (see Figure 5). Investors in biotechs – the venture capital (VC) firms – focused their attention almost entirely on M&A exits, and advised many of their yet immature...
portfolio companies to raise cash via licensing agreements. The closure of the capital markets for this sector has had a significant knock-on effect on VC investments, as the exit pipelines became crowded and many VCs decided to hold on tighter to their cash for new investments. Although the big freeze of the IPO market seems to be receding, development-stage biotechs need to offer their shares at a discount to their initial estimates – even if they have a phase III pipeline product. Such was the case with Ironwood Pharmaceuticals which raised 30 per cent less than planned in its IPO.

CONCLUSION

Undoubtedly, the financial crisis has shaken the pharmaceutical deal-making landscape and may have changed the way potential licensees look at value forever. Both collaborative and acquisition deal numbers are down, however licensing deal valuations are up; not just paying more but sharing in the risk in new creative ways makes the new deal winners. Even though overall buyers may wield more negotiating power now than in the pre-crisis era, for attractive and especially late-stage assets, it is still a sellers’ market. Other parties – such as large VC, private equity firms and even CROs – are also entering this competitive strategic transactions landscape, participating in risk-sharing agreements by using their cash in equity or project-financing deals alongside co-investing pharmaceutical partners.

The greatest issue that the industry is facing in deal-making is the slow pace of progress of the development pipelines of innovators – limiting the availability of assets for licensing or acquisition. The credit crunch has forced many innovators to focus their resources on their lead assets; this represents a major setback for very early-stage candidates. This limited availability, combined with the voracious innovation needs of large pharma, will continue to produce strong competition in business development and high-value licensing deals – but only for higher quality candidates leaving very early-stage biotechs with limited financing options. The opening of the public markets will be key to unlocking the flow of investment in biotechnology, and the ensuing increased confidence will no doubt lift activity in the field of strategic transactions to a healthier level.