Exchange Rates

The following table shows, for the years and dates indicated, certain information concerning the rate of exchange of US dollar per Swiss franc based on exchange rate information found on Reuters Market System. The exchange rate in effect on January 19, 2010, as found on Reuters Market System, was CHF 1.00 = $0.97.

Year ended December 31, ($ per CHF)	Period End	Average[1]	Low	High
2005	0.76	0.80	0.75	0.88
2006	0.82	0.80	0.76	0.84
2007	0.88	0.83	0.80	0.91
2008	0.94	0.93	0.82	1.02
2009	0.97	0.92	0.84	1.00
Month end,				
August 2009			0.92	0.95
September 2009			0.94	0.98
October 2009			0.96	0.99
November 2009			0.97	1.00
December 2009			0.95	1.00
January 2010[2]			0.96	0.98

(1) Represents the average of the exchange rates on the last day of each full month during the year.

(2) Through January 19, 2010.

3.B Capitalization and Indebtedness

Not applicable.

3.C Reasons for the offer and use of proceeds

Not applicable.

3.D Risk Factors

Our businesses face significant risks and uncertainties. You should carefully consider all of the information set forth in this annual report on Form 20-F and in other documents we file with or furnish to the SEC, including the following risk factors, before deciding to invest in any Novartis securities. Our business as well as our financial condition or results of operations could be materially adversely affected by any of these risks, as well as other risks and uncertainties not currently known to us or not currently deemed to be material.

Risks Facing Our Business

Our Pharmaceuticals Division faces and will continue to face important patent expirations and aggressive generic competition.

Our Pharmaceuticals Division's products are generally protected by patent rights, which are intended to provide us with exclusive rights to market the patented products. However, those patent rights are of

varying strengths and durations. Loss of market exclusivity for one or more important products—which we will face in the near future—will have a material adverse effect on our results of operations.

The introduction of a generic version of a branded medicine typically results in a significant and rapid reduction in net sales for the branded product because generic manufacturers typically offer their unbranded versions at sharply lower prices. Such competition can result from the regular expiration of the term of the patent. Such competition can also result from the entry of generic versions of another medicine in the same therapeutic class as one of our drugs, or in another competing therapeutic class. In addition, generic manufacturers are taking an increasingly aggressive approach to challenging patents, conducting so-called "launches at risk" of products that are still under legal challenge for patent infringement, before final resolution of legal proceedings.

We also rely in all aspects of our businesses on unpatented proprietary technology, know-how, trade secrets and other confidential information, which we seek to protect through various measures including confidentiality agreements with licensees, employees, third-party collaborators, or consultants who may have access to such information. If these agreements are breached, our contractual remedies may not be adequate to cover any losses.

Some of our best-selling products are expected to face significant competition in the coming years due to the end of market exclusivity resulting from the expiry of patent protection.

- The patent on valsartan, the active ingredient of our top-selling drug, *Diovan/Co-Diovan/Diovan HCT* (high blood pressure), expires in the major countries of the EU during 2011, in the US in September 2012, and in Japan in 2013. Our sales may also be impacted in 2010 when a competitor product, Cozaar®, is expected to become the first branded medicine in the same therapeutic class as *Diovan* to lose market exclusivity. In addition, the active ingredient valsartan is also used in the single-pill combination therapies *Exforge/Exforge HCT* (high blood pressure). While there is an expectation that market exclusivities for *Exforge/Exforge HCT* will remain in the EU and Japan due to regulatory exclusivities, there is a risk that the product may face generic competition in the US in September 2012.

- The patent on *Femara* (cancer) will expire in 2011 in the US and in major European markets, while generic versions have already been launched in some smaller European markets.

- Patents protecting the *Sandostatin LAR* (acromegaly) formulation, the long-acting version of this drug that represents a majority of our *Sandostatin* sales, expire in July 2010 in major markets outside the US, and in 2014 and beyond in the US.

Some of our products are also the subject of ongoing patent litigation. In particular, zoledronic acid, the active ingredient in *Zometa* (cancer), as well as in *Reclast/Aclasta* (osteoporosis), is currently the subject of US patent litigation, with the possibility of an "at risk launch" of a generic version of *Zometa* by one or more generic competitors in December 2010, when the 30-month stay period expires, absent any court decision preventing such a launch before then.

For more information on the patent status of our Pharmaceuticals Division's products see "Item 4. Information on the Company—Item 4.B Business Overview—Pharmaceuticals—Intellectual Property" and "Item 18. Financial Statements—note 20".

Clearly, with respect to products for which the patent terms are expiring, the loss of exclusivity of these products will have a material adverse effect on our business, financial condition and results of operations. In addition, should we unexpectedly lose exclusivity on additional products due to patent litigation or other reasons, this will have a material adverse effect on our business, financial condition and results of operations, both due to the loss of revenue, and the difficulties in planning for such losses.

Our business is increasingly affected by pressures on drug pricing.

The growth of overall healthcare costs as a percentage of gross domestic product in many countries means that governments and payors are under intense pressure to control spending even more tightly. These pressures are particularly strong given the lingering effects of the recent global economic and financial crisis. As a result, our businesses and the healthcare industry in general are operating in an ever more challenging environment with very significant pricing pressures. These ongoing pressures include government-imposed industry-wide price reductions, mandatory pricing systems, an increase in imports of drugs from lower-cost countries to higher-cost countries, shifting of the payment burden to patients through higher co-payments, limiting physicians' ability to choose among competing medicines, mandatory substitution of generic drugs and growing pressure on physicians to reduce the prescribing of patented prescription medicines. We expect these efforts to continue as healthcare payors around the globe—in particular government-controlled health authorities, insurance companies and managed care organizations—step up initiatives to reduce the overall cost of healthcare, restrict access to higher-priced new medicines, increase the use of generics and impose overall price cuts. Such initiatives include the current efforts in the US to enact healthcare reform.

These initiatives not only affect the results of our Pharmaceuticals Division, but also have an increasing impact on the prices we can charge for the generic drugs marketed by our Sandoz Division. This is particularly true in Europe and especially Germany, our second-largest market for generic products, where various measures have been introduced to require generic manufacturers to lower their prices. In addition, in the US, a combination of aggressive efforts by distributors and retailers to increase their profit margins on generic products that are considered commodities, intense and increasing competition between generic pharmaceutical manufacturers, and changes and potential future changes to government regulations, including state and federal regulations and regulations impacting Medicare and Medicaid, are increasing the downward pressure on our prices there. We expect these and other challenges to continue to put pressure on our revenues, and therefore they could have a material adverse effect on our business, financial condition and results of operations.

For more information on pricing controls and on our challenging business environment see "Item 4. Information on the Company—Item 4.B Business Overview—Pharmaceuticals—Price Controls."

Our research and development efforts may not succeed in bringing high-potential products to market.

Our ability to continue to grow our business and to replace sales lost due to the end of market exclusivity depends upon the success of our research and development activities in identifying and developing high-potential breakthrough products that address unmet needs, are accepted by patients and physicians, and are reimbursed by payors. To accomplish this, we commit substantial effort, funds and other resources to research and development, both through our own dedicated resources and through various collaborations with third parties. Developing new pharmaceutical products and bringing them to market, however, is a costly, lengthy and uncertain process. In spite of our significant investments, there can be no guarantee that our research and development activities will produce a sufficient number of commercially viable new products.

The research and development process for a new pharmaceutical product can take up to 15 years, or even longer, from discovery to commercial product launch—and with a limited available patent life the longer it takes to develop a product, the less time there will be for us to recoup our development costs. New products need not only undergo intensive preclinical and clinical testing, but also must pass a highly complex, lengthy and expensive approval process. During each stage, there is a substantial risk that we will encounter serious obstacles which will further delay us and add substantial expense, or that we will not achieve our goals and, accordingly, may be forced to abandon a product in which we have invested substantial amounts of time and money. Reasons for delays may include: failure of the product candidate in preclinical studies; difficulty enrolling patients in clinical trials or delays or clinical trial holds at clinical trial sites; delays in completing formulation and other testing and work necessary to support an

application for regulatory approval; adverse reactions to the product candidate or indications of other safety concerns; insufficient clinical trial data to support the safety or efficacy of the product candidate; our inability to manufacture sufficient quantities of the product candidate for development or commercialization activities in a timely and cost-efficient manner; and failure to obtain, or delays in obtaining, the required regulatory approvals for the product candidate or the facilities in which it is manufactured. Similar efforts are required to develop new products in our other divisions, as well, and similar risks apply. For a description of the approval processes which must be followed to market our products, see the sections headed "Regulation" included in the descriptions of our four operating divisions under "Item 4. Information on the Company—Item 4.B Business Overview."

The pharmaceuticals industry has seen a dearth of regulatory approvals for new drugs in recent years, coupled with a significant increase in the cost per drug approved. For example, the FDA approved only 26 entirely new drugs (new molecular entities) in 2009. This follows 24 new approvals in 2008 and only 18 in 2007, one of the lowest single-year totals since 1983, when there were 14. These approval levels compare with the average annual approval rate of more than 30 new medicines per year in the period from 1996 to 2004. In addition, many of the new drugs approved in recent years have not been as financially successful as those approved in prior years. This relatively low level of research productivity comes at a time when the worldwide pharmaceuticals industry is estimated to be spending nearly $50 billion each year on research and development activities, according to the Tufts Center for the Study of Drug Development. As a result, industry research and development spending per new molecular entity approved has climbed more than 200% to $3.7 billion for 2006–2008 compared to only $1.2 billion for 1998–2000.

If we are unable to maintain a flow of successful new products and new indications for existing products sufficient to cover our substantial research and development costs and to replace sales lost as older products are lost to generic competition, or displaced by competing products or therapies—including the significant number of important products likely to face generic competition in the near future—this could have a material adverse effect on our business, financial condition or results of operations.

In addition, we invest a significant amount of effort and financial resources into research and development collaborations with third parties—organizations that we do not control. Many of these may be small companies that do not have the same resources and development expertise as Novartis. If these third parties fail to meet our expectations, we may lose our investment in the collaborations or fail to receive the expected benefits, which could have a material adverse effect on our business, financial condition or results of operations.

Increasing regulatory scrutiny of drug safety and efficacy may adversely affect us.

Following several widely publicized issues in recent years, health regulators are increasingly focusing on product safety. Recently, the Obama Administration has publicly emphasized the importance of enforcing US drug safety regulations. In addition, authorities have paid increased attention to the risk/benefit profile of pharmaceutical products. These developments have led to requests for more clinical trial data, for the inclusion of a significantly higher number of patients in clinical trials, and for more detailed analysis of the trials. As a result, the already lengthy and expensive process of obtaining regulatory approvals for pharmaceutical products has become even more challenging.

In addition, the post-approval regulatory burden has been increasing. Approved drugs have increasingly been subject to requirements such as risk evaluation and mitigation strategies, comparative effectiveness studies and requirements to conduct post-approval Phase IV clinical trials to gather far more detailed safety and other data on products. These requirements have the effect of making the maintenance of regulatory approvals increasingly expensive, and further heightening the risk of recalls or loss of market share.

These regulatory requirements, and any additional adverse regulatory developments in the approval process for new products or in the continued marketing of significant existing products, or any increases in regulation or major changes in the healthcare landscape, could have a material adverse effect on our business, financial condition and results of operations.

Legal proceedings may have a significant negative effect on our results of operations.

We are obligated to comply with the laws of the approximately 140 countries in which we operate, covering an extremely wide range of activities. To that end, we have a strong global compliance with law program in place. Nonetheless, in recent years, there has been a trend of increasing litigation and government investigations against companies operating in the industries of which we are a part, especially in the US. A number of our subsidiaries are, and will likely continue to be, subject to various legal proceedings that arise from time to time, including proceedings regarding product liability, commercial disputes, employment and wrongful discharge, antitrust, securities, sales and marketing practices, health and safety, environmental, tax, privacy, and intellectual property matters. As a result, we may become subject to substantial liabilities that may not be covered by insurance. Litigation is inherently unpredictable, and large verdicts sometimes occur. As a consequence, we may in the future incur judgments or enter into settlements of claims that could have a material adverse effect on our results of operations or cash flows.

In particular, governments and regulatory authorities have been stepping up their compliance and law enforcement activities in recent years in key areas, including corruption, marketing practices, antitrust and trade restrictions. Responding to such investigations is costly, and a significant diversion of management's attention from our business. In addition, such investigations may affect our reputation and create a risk of potential exclusion from US federal government reimbursement programs. These factors have contributed to decisions by us and other companies in our industry to enter into settlement agreements with governmental, and particularly federal, authorities. Those settlements have involved and may continue to involve very large cash payments, including the potential repayment of amounts allegedly obtained improperly and penalties up to treble damages. In addition, settlements of healthcare fraud cases often require companies to enter into a corporate integrity agreement, which is intended to regulate company behavior for a period of years. Also, matters underlying governmental investigations and settlements may be the subject of separate private litigation.

Our businesses have been subject, from time to time, to such governmental investigations and information requests by regulatory authorities. For example, we have been cooperating with parallel civil and criminal investigations by the US Attorney's Office for the Eastern District of Pennsylvania (EDPA) into allegations of potential off-label marketing and promotion of our epilepsy drug, *Trileptal,* as well as certain payments made to healthcare providers in connection with this medicine. one of our affiliates recently entered into a plea agreement with the EDPA, which is contingent on court approval, to resolve criminal allegations. Pursuant to the plea agreement, the affiliate will plead guilty to a misdemeanor violation of the US Food, Drug and Cosmetic Act and pay $185 million. The affiliate is currently negotiating with the EDPA to resolve civil claims relating to *Trileptal.* In the fourth quarter of 2009, we increased provisions relating to the EDPA's *Trileptal* investigation by $318 million. Total provisions relating to the EDPA's civil and criminal *Trileptal* investigations were $397 million. Our affiliate is also cooperating with an investigation by the EDPA regarding potential off-label marketing and promotion as well as payments made to healthcare providers in connection with five other products: *Diovan, Exforge, Sandostatin, Tekturna* and *Zelnorm.* We are unable to assess with reasonable certainty the outcome of the investigation related to these five products or the amounts, which could be material, that we might be required to pay to resolve this investigation.

At the same time, our Sandoz Division may, from time to time, seek approval to market a generic version of a product before the expiration of patents claimed by one of our competitors for the branded product. We do this in cases where we believe that the relevant patents are invalid, unenforceable, or

would not be infringed by our generic product. As a result, affiliates of our Sandoz Division frequently face patent litigation, and in certain circumstances, we may elect to market a generic product even though patent infringement actions are still pending. Should we elect to proceed in this manner and conduct a "launch at risk," we could face substantial damages if the final court decision is adverse to us.

Separately, the US affiliates of our Pharmaceuticals and Sandoz Divisions are the subjects of lawsuits brought by private plaintiffs and a number of state and local governments alleging that they have fraudulently overstated the Average Wholesale Price and "best price," which are, or have been, used by the US federal and state governments in the calculation of, respectively, US Medicare reimbursements and Medicaid rebates. While a Novartis affiliate was successful on appeal in one of these actions, juries have awarded plaintiffs substantial damages in three trials against Novartis affiliates to date. More trials are expected in the future.

Adverse judgments or settlements in any of these cases could have a material adverse effect on our business, financial condition and results of operations.

In addition, in many countries, particularly less-developed markets, we rely heavily on third-party distributors and other agents for the marketing and distribution of our products. Many of these third parties are small and do not have internal compliance resources comparable to those within our organization. Some of these countries are plagued by corruption. If our efforts to screen our third-party agents and detect cases of potential misconduct fail, we could be held responsible for the noncompliance of these third parties with applicable laws and regulations, which may have a negative effect on our reputation and our business.

For more detail regarding specific legal matters currently pending against us and provisions for such matters, see "Item 18. Financial Statements—note 20."

An increasing amount of intangible assets and goodwill on our books may lead to significant impairment charges in the future.

The amount of goodwill and other intangible assets on our consolidated balance sheet has increased significantly in recent years, primarily due to acquisitions. Although no significant additional impairments are currently anticipated, impairment testing could lead to material impairment charges in the future.

We regularly review our long-lived intangible and tangible assets, including identifiable intangible assets, investments in associated companies and goodwill, for impairment. Goodwill, acquired research and development, and acquired development projects not yet ready for use are subject to impairment review at least annually. Other long-lived assets are reviewed for impairment when there is an indication that an impairment may have occurred. Impairment testing under IFRS may lead to impairment charges in the future. Any significant impairment charges could have a material adverse effect on our results of operations. For a detailed discussion of how we determine whether an impairment has occurred, what factors could result in an impairment and the increasing impact of impairment charges on our results of operations, see "Item 5.A Operating Results—Critical Accounting Policies and Estimates—Impairment of Long-Lived Intangible and Tangible Assets" and "Item 18. Financial Statements—note 11."

Risks related to our expected acquisition of a majority interest in Alcon and subsequent merger with Alcon.

On January 4, 2010, we announced that we had exercised our option obtained in 2008 to acquire Nestlé's remaining 52% majority stake in Alcon (such that, with the 25% we previously purchased from Nestlé, we would become a 77% shareholder of Alcon). We also separately proposed to enter into an all-share direct merger with Alcon to acquire the remaining 23% publicly-held stake.

Our acquisition of the 52% majority stake from Nestlé is conditioned upon the receipt of certain governmental clearances or approvals, including the expiration or termination of the applicable waiting period under the US Hart-Scott-Rodino Act, the issuance by the European Commission (EC) of a

decision under the EC Merger Regulation declaring the merger compatible with the common market, and the clearance or approval of the merger by the antitrust regulators in a number of other countries. While Nestlé and Novartis have agreed to use their reasonable best efforts to obtain these clearances and approvals, there can be no assurance that they will be obtained, or that the governmental authorities will not seek to impose material conditions on the acquisition or require the divestment of material assets.

In addition, our proposed merger with Alcon is conditioned both on the completion of the 52% stake acquisition from Nestlé and on the approval by the Boards of Directors of Novartis and Alcon. The merger would also require two-thirds approval by the shareholders of Novartis and Alcon voting at their respective meetings. If the merger is delayed, the timing and/or realization of the anticipated benefits and cost savings from fully integrating the businesses of Novartis and Alcon will be adversely affected. Once the acquisition and merger with Alcon is approved and completed, its success will depend, in part, on the combined company's ability to realize these benefits and cost savings and to retain and motivate its executives and key employees.

Our indebtedness could adversely affect our operations.

As of December 31, 2009 we had $8.7 billion of non-current financial debt and $5.3 billion of current financial debt. In addition, we expect to increase our indebtedness by $16 billion to finance our acquisition of Nestlé's 52% stake in Alcon. Our current and future debt requires us to dedicate a portion of our cash flow to service interest and principal payments and may limit our ability to engage in other transactions and otherwise place us at a competitive disadvantage to our competitors that have less debt. We may have difficulty refinancing our existing debt or incurring new debt on terms that we would consider to be commercially reasonable, if at all.

We may not be able to realize the expected benefits of our significant investments in emerging growth markets.

At a time of slowing growth in sales of pharmaceuticals in industrialized countries, many emerging markets have experienced comparatively strong economies, leading to proportionally higher growth and an increasing contribution to the industry's global performance. In 2009, we generated approximately 65% (2008: 64%) of our net sales from continuing operations in the world's seven largest developed markets, while the six leading emerging markets—Brazil, China, India, Russia, South Korea and Turkey—contributed 9% (2008: 9%) of net sales. However, combined net sales in these six priority emerging markets grew 17% in local currency in 2009, compared to 10% sales growth in local currency in the seven largest developed markets during the same period. As a result of this trend, we have been taking steps to increase our presence in these priority emerging markets and in other emerging markets. For example, a cross-divisional operating structure is being expanded following its initial implementation in 2007 to accelerate growth in smaller emerging markets and better position the comprehensive presence of all Novartis products. These types of markets include Northern and Sub-Saharan Africa, Central Asia and some countries in Southeast Asia.

There is no guarantee that our efforts to expand our sales in these countries will succeed, or that these countries will continue to experience growth rates in excess of the world's largest markets. Some emerging countries may be especially vulnerable to the after-effects of the recent global financial crisis, or may have very limited resources to spend on healthcare. See "—The after-effects of the recent economic and financial crisis may have a material adverse effect on our results" below. Many of these countries have a relatively limited number of persons with the skills and training suitable for employment at an enterprise such as ours. See also "—An inability to attract and retain qualified personnel could adversely affect our business" below. In other emerging countries, we may be required to rely on third-party agents, which may put us at risk of liability. See also "—Legal proceedings may have a significant negative effect on our results of operations" above. A failure to continue to expand our business in emerging growth markets could have a material adverse effect on our business, financial condition or results of operations.

The after-effects of the recent global economic and financial crisis may have a material adverse effect on our results.

Many of the world's largest economies and financial institutions continue to be impacted by the recent global economic and financial crisis, with some continuing to face financial difficulty, a decline in asset prices, liquidity problems and limited availability of credit. It is uncertain how long these effects will last, or whether economic and financial trends will worsen or improve. Such uncertain economic times may have a material adverse effect on our revenues, results of operations, financial condition and ability to raise capital. Some of our businesses, including the business units of our Consumer Health Division, may be particularly sensitive to declines in consumer spending. In addition, our Pharmaceuticals, Vaccines and Diagnostics, and Sandoz Divisions may not be immune to consumer cutbacks, particularly given the increasing requirements that patients pay a larger contribution toward their own healthcare costs. As a result, there is a risk that consumers may cut back on prescription drugs and vaccines, as well as consumer health products, to help cope with rising costs and difficult economic times.

The economic crisis may also lead to a disruption or delay in the performance of third parties on which we rely for parts of our business, including licensees and collaboration partners, distributors, clinical trial providers and suppliers of products, intermediates and other goods or services. Such disruptions or delays could have an adverse effect on our business and results of operations.

In addition, the varying impact of difficult economic times on the economies of different countries has impacted, and may continue to unpredictably impact, the translation of our operating results into US dollars, our reporting currency. The financial crisis may also cause the value of our investments in our pension plans to decrease, requiring us to increase our funding of those pension plans. In addition, the financial crisis may also result in a lower return on our financial investments, and a lower value on some of our assets. The financial crisis could also negatively impact the cost of financing or our ability to finance the second step of the Alcon acquisition on favorable terms.

At the same time, significant changes and volatility in the consumer environment, the equity, credit and foreign exchange markets, and in the competitive landscape make it increasingly difficult for us to predict our revenues and earnings into the future. As a result, any revenue or earnings guidance or outlook which we have given or might give may be overtaken by events, or may otherwise turn out to be inaccurate. Though we endeavor to give reasonable estimates of future revenues and earnings at the time we give such guidance, under current market conditions there is a significant risk that such guidance or outlook will turn out to be, or to have been, incorrect.

Failure to obtain marketing exclusivity periods for new generic products, or to develop differentiated products, as well as intense competition from branded pharmaceuticals companies, may have an adverse effect on the success of our Sandoz Division.

Our Sandoz Division achieves significant revenue opportunities when it secures and maintains exclusivity periods granted for generic products in certain markets—particularly the 180-day exclusivity period granted in the US by the Hatch-Waxman Act—and when it is able to develop differentiated, "difficult-to-make" products with few, if any, generic competitors. Failure to obtain and maintain these market opportunities could have an adverse effect on the success of Sandoz. In addition, the division faces intense competition from branded pharmaceuticals companies, which commonly take aggressive steps to limit the availability of exclusivity periods or to reduce their value. These activities may increase the costs and risks associated with our efforts to introduce generic products and may delay or entirely prevent their introduction.

Sandoz may not be able to realize the expected benefits of our significant investments in "biosimilar" drugs.

Sandoz has made, and expects to continue to make, significant investments in the development of biotechnology-based products intended for sale as bioequivalent or "biosimilar" generic versions of

currently marketed biotechnology products. The development of such products is costly and complex. In addition, to date, many countries, most notably the US, do not yet have a legislative or regulatory pathway which would permit such products to be sold in a manner in which the biosimilar product would be readily substitutable for the originator product. Significant delays in the development of such pathways, or significant impediments that may be built into such pathways, could diminish the value of the investments that Sandoz has made, and will continue to make, in its biotechnology operations.

There is no guarantee that our efforts to develop and market these products will be successful or that we will be able to realize the expected benefits from our significant investment in this area. A failure to build and expand our position in biosimilars or to achieve the expected benefits from our investments in this area could have an adverse effect on our business, financial condition and results of operations.

A failure to develop differentiated vaccines or to bring key products to market in time for the relevant disease seasons could have an adverse effect on the success of our Vaccines and Diagnostics Division.

The demand for some products marketed by our Vaccines and Diagnostics Division, such as influenza vaccines, is seasonal, while the demand for other vaccines, such as pediatric combination vaccines, depends on changes in birth rates in developed countries. Some vaccines that make an important contribution to the division's net sales and profits, particularly the key seasonal influenza vaccine products, are considered commodities, meaning that there are few therapeutic differences among the vaccines offered by competitors. As a result, these vaccines may suffer from price erosion due to excess product supply across the industry, or from intense price competition. In addition, the market for pandemic and seasonal influenza vaccines is experiencing an unprecedented period of significant volatility given the global A (H1N1) influenza pandemic. While deliveries of pandemic vaccines provided significant contributions to results in 2008 (from A (H5N1) vaccines) and 2009 (from A (H1N1) vaccines), no guarantee can be made that these types of influenza vaccines will provide contributions in 2010 and the future. The ability to develop differentiated, effective and safe vaccines, to gain approval for inclusion in national immunization recommendation lists, and to consistently produce and deliver high-quality vaccines in time for the relevant disease seasons are critical to the success of our Vaccines and Diagnostics Division. In particular, our Vaccines and Diagnostics Division has been working to develop two vaccines to combat different strains of meningococcal meningitis. These products are the primary products in the division's pipeline. If our Vaccines and Diagnostics Division were unable to successfully develop one or both of these products, or if the approval of either or both of these products were significantly delayed, it could have a material adverse effect on the medium- to long-term success of the division.

Our OTC Business Unit faces adverse impacts from increased competition, as well as potential questions of safety and efficacy.

The OTC Business Unit of our Consumer Health Division sells over-the-counter medicines, many of which contain ingredients also sold by competitors in the OTC industry. Particularly in the US, our branded OTC products compete against "store brand" products that are made with the same active ingredients as ours. These products do not carry our trusted brand names, but they also do not carry the burden of the expensive advertising and marketing that helped to establish demand for the product. As a result, the store brands may be sold at lower prices. In recent years, consumers have increasingly begun to purchase store brand OTC products instead of branded products. In addition, in recent years, significant questions have arisen regarding the safety, efficacy and potential for misuse of certain products sold by our OTC Business Unit and its competitors. As a result, health authorities around the world have begun to re-evaluate some important over-the-counter products, leading to restrictions on the sale of some of them and even the banning of certain products. For example, in October 2008, acting in consultation with the FDA, we voluntarily re-labeled our US cough and cold medicines to indicate that these products should not be used in children under four years of age. Litigation has often followed actions such as these, particularly in the US. Additional actions and litigation regarding OTC products are possible in the future. These trends have had, and may continue to have, a significant adverse effect on the success of our OTC

Business Unit. See also "—The after-effects of the recent economic and financial crisis may have a material adverse effect on our results" above.

The manufacture of our products is highly regulated and complex, and may encounter a variety of issues that lead to supply disruptions.

The products we market, distribute and sell are either manufactured at our own dedicated manufacturing facilities or by third parties. In either case, we need to ensure that manufacturing processes comply with applicable regulations and manufacturing practices, as well as our own high quality standards. In particular, the manufacture of our products is heavily regulated by governmental authorities around the world, including the FDA. If we or our third-party suppliers fail to comply fully with such regulations then there could be a government-enforced shutdown of production facilities or production lines, which in turn could lead to product shortages. A failure to comply fully with such regulations could also lead to a delay in the approval of new products. For example, in August 2008, our Wilson, North Carolina facility received a Warning Letter from the FDA that raised concerns regarding the Wilson facility's compliance with FDA Good Manufacturing Practice regulations, and stated that until the FDA confirmed that the deficiencies had been corrected, the FDA could recommend disapproval of any pending NDAs, abbreviated NDAs or export certificate requests submitted by our Sandoz US affiliate. Voluntary recalls were made in September and in the fourth quarter of 2008 as part of the FDA review of the facility. While this Warning Letter was resolved in August 2009 following a successful FDA inspection, there can be no guarantee that we will not face similar issues in the future, or that we will successfully manage such issues when they arise.

In addition, many of our products involve technically complex manufacturing processes or require a supply of highly specialized raw materials. For some products and raw materials, we may also rely on a single source of supply. As a result of these factors, the production of one or more of our products may be disrupted from time to time.

A disruption in the supply of certain key products, or our failure to accurately predict demand, could have a material adverse effect on our business, financial condition or results of operations. And because our products are intended to promote the health of patients, for some of our products, a supply disruption could subject us to lawsuits or to allegations that the public health, or the health of individuals, has been endangered.

If any of numerous key assumptions and estimates in calculating our pension plan obligations turn out to be different than our actual experience, we may be required to increase substantially our contributions to pension plans as well as our pension-related costs in the future.

We sponsor pension and other post-employment benefit plans in various forms. These plans cover a significant portion of our current and former associates. We are required to make significant assumptions and estimates about future events in calculating the present value of expected future expense and liability related to these plans. These include assumptions about discount rates we apply to estimated future liabilities, expected returns on plan assets and rates of future compensation increases. In addition, our actuarial consultants provide our management with historical statistical information such as withdrawal and mortality rates in connection with these estimates. Assumptions and estimates used by Novartis may differ materially from the actual results we experience due to changing market and economic conditions (including the effects of the recent global economic and financial crisis), higher or lower withdrawal rates, or longer or shorter life spans of participants, among other variables. For example, a decrease in the discount rate we apply in determining the present value of expected future obligations of one-half of one percent would have increased our year-end defined benefit obligation by $1.1 billion. Any differences between our assumptions and estimates and our actual experience could have a material effect on our results of operations and financial condition. For more information on obligations under retirement and other post-employment benefit plans and underlying actuarial assumptions, see "Item 5. Operating and Financial Review and Prospects—Item 5.A Operating Results—Critical Accounting Policies and

Estimates—Retirement and other post-employment plans" and "Item 18. Financial Statements—note 25". See also "—The after-effects of the recent economic and financial crisis may have a material adverse effect on our results" above.

Changes in tax laws or their application could adversely affect our results of operations.

The integrated nature of our worldwide operations enables us to reduce the effective tax rate on our earnings because a portion of our earnings are taxed at more favorable rates in some jurisdictions. Changes in tax laws or their application with respect to matters such as transfer pricing, intercompany dividends, controlled corporations, and limitations on tax relief allowed on the interest on intercompany debt, could increase our effective tax rate and adversely affect our financial results.

Ongoing consolidation among our distributors may increase both the purchasing leverage of key customers and the concentration of credit risk.

Increasingly, a significant portion of our global sales are made to a relatively small number of US drug wholesalers, retail chains and other purchasing organizations. For example, our three most important customers globally are all in the US, and accounted for approximately 8%, 7% and 6%, respectively, of Group net sales from continuing operations in 2009. The largest trade receivables outstanding were for these three customers, amounting to 9%, 6% and 6%, respectively, of the Group's trade receivables at December 31, 2009. The trend has been toward further consolidation among our distributors, especially in the US. As a result, our distributors are gaining additional purchasing leverage, which increases the pricing pressures facing our businesses. Moreover, we are exposed to a concentration of credit risk as a result of this concentration among our customers. If one or more of our major customers experienced financial difficulties, the effect on us would be substantially greater than in the past. This could have a material adverse effect on our business, financial condition and results of operations.

An inability to attract and retain qualified personnel could adversely affect our business.

We highly depend upon skilled personnel in key parts of our organization, and we invest heavily in recruiting and training qualified individuals. The loss of the service of key members of our organization—particularly senior members of our scientific and management teams—could delay or prevent the achievement of major business objectives. In addition, the success of our research and development activities is particularly dependent on our ability to attract and retain sufficient numbers of high-quality researchers and development specialists.

Future economic growth will demand more talented associates and leaders, yet the market for talent will become increasingly competitive. Shifting demographic trends will result in fewer students, fewer graduates and fewer people entering the workforce in the Western world in the next 10 years. The supply of talent for key functional and leadership positions is decreasing, and a talent gap is clearly visible for some professions and geographies—engineers in Germany, for example. Recruitment is increasingly regional or global in specialized fields such as clinical development, biosciences, chemistry and information technology.

Emerging markets are expected to be a driving force in global growth, but in countries like Russia and China there is a limited pool of executives with the training and international experience needed to work successfully in a global organization like Novartis. Moreover, younger generations around the world have changing expectations toward careers, engagement and the integration of work in their overall lifestyles. Geographic mobility is expected to decrease, and talent in emerging countries anticipate ample career opportunities closer to home than in the past.

We face intense competition for an increasingly limited pool of qualified individuals from numerous pharmaceutical and biotechnology companies, universities, governmental entities and other research

institutions. As a result, we may be unable to attract and retain qualified individuals in sufficient numbers, which would have an adverse effect on our business, financial condition and results of operations.

Environmental liabilities may adversely impact our results of operations.

The environmental laws of various jurisdictions impose actual and potential obligations on us to remediate contaminated sites. While we have set aside substantial provisions for worldwide environmental liabilities, there is no guarantee that additional costs will not be incurred beyond the amounts for which we have provided in the Group consolidated financial statements. If we are required to further increase our provisions for environmental liabilities in the future, or if we fail to properly manage environmental risks, this could have a material adverse effect on our business, financial condition and results of operations. For more detail regarding environmental matters, see "Item 4.D Property, Plants and Equipment—Environmental Matters" and "Item 18. Financial Statements—note 20."

Foreign exchange fluctuations may adversely affect our earnings and the value of some of our assets.

In the recent past, the US dollar, our reporting currency, has suffered significant decreases in value against other world currencies. Because a significant portion of our earnings and expenditures are in currencies other than the US dollar, these decreases have had a significant impact on our reported net sales and earnings. In 2009, 35% of our net sales from continuing operations were made in US dollars, 31% in euros, 8% in Japanese yen, 3% in Swiss francs and 23% in other currencies. During the same period, 33% of our expenses from continuing operations arose in US dollars, 31% in euros, 12% in Swiss francs, 4% in Japanese yen and 20% in other currencies. As has happened in the recent past, changes in exchange rates between the US dollar and other currencies can result in increases or decreases in our sales, costs and earnings. Fluctuations in exchange rates between the US dollar and other currencies may also affect the reported value of our assets measured in US dollars and the components of shareholders' equity. For more information on the effects of currency fluctuations on our consolidated financial statements and on how we manage currency risk, see "Item 5.A Operating Results—Effects of Currency Fluctuations" and "Item 11. Quantitative and Qualitative Disclosures about Non-Product-Related Market Risk." See also "—The after-effects of the recent economic and financial crisis may have a material adverse effect on our results" above.

Significant disruptions of information technology systems or breaches of data security could adversely affect our business.

Our business is increasingly dependent on increasingly complex and interdependent information technology systems, including Internet-based systems, to support business processes as well as internal and external communications. The size and complexity of our computer systems make them potentially vulnerable to breakdown, malicious intrusion and computer viruses which may result in the loss of key information or impairment of production and business processes. Data security breaches—whether by employees or others—may expose sensitive data to unauthorized persons. Such disruptions and breaches of security could materially and adversely affect our business.

Earthquakes could adversely affect our business.

Our corporate headquarters, the headquarters of our Pharmaceuticals and Consumer Health Divisions, and certain of our major Pharmaceuticals Division production facilities are located near earthquake fault lines in Basel, Switzerland. In addition, other major facilities of our Pharmaceuticals, Vaccines and Diagnostics, Sandoz and Consumer Health Divisions are located near major earthquake fault lines in various locations around the world. In the event of a major earthquake, we could experience business interruptions, destruction of facilities and loss of life, all of which could have a material adverse effect on our business, financial condition and results of operations.