Pharmaceuticals, Biopharmaceuticals, Medical Devices, and Equipment

Advanced institutional buyers in the “beyond the pill” strategic segment increasingly demand that firms guarantee outcome rates. Producers of pharmaceutical products also need to integrate their products with personalized healthcare and remote monitoring technologies.

In the consumer-facing “wellness” strategic segment, buyers expect producers to integrate medicinal and emotional benefits in product packaging and marketing. They will also expect the opportunity to experiment with products in retail sales channels.

For Croatian companies to embrace these opportunities, they need to link into newer GVCs and embrace the integration of services and products. Croatia could support this shift through targeted catalytic initiatives—for example, connecting Croatia’s outlying populations via remote healthcare.
Industry Snapshot

The global market for manufactured pharmaceuticals, biopharmaceuticals, medical equipment, and devices ("pharma") is EUR 887 billion and growing. Croatian companies occupy a small part of this market. However, they offer a diverse range of products that can be a foundation for further growth.

Pharmaceutical industries are a small proportion of Croatia’s economy. Firms in this sector employ about 4,000 people of 1.1 million jobs in Croatia’s economy. They consist of about 62 of the 147,000 firms in Croatia.

Croatia’s pharmaceutical industry is concentrated. Producers of generics and active pharmaceutical ingredients account for the most output. Pharmaceutical firms are also highly concentrated. Pliva’s revenues are over 50% higher than those of the next nine largest companies combined.

Pharmaceutical industries are export-intensive. Croatia exports about EUR 529 million of pharmaceuticals per year. Pharmaceuticals account for 1.3 percent of Croatia’s output but 4.6 percent of its exports.

Nevertheless, Croatia is a net importer of pharmaceutical products. Croatia imported EUR 887 million of pharmaceutical products in 2015.

Revenues have been increasing, but net profits have been volatile. Revenues increased from EUR 663 million in 2013 to EUR 757 million in 2015. However, in 2015, nine of the ten largest pharmaceutical companies in Croatia saw profits decline.

Net profits of Croatia’s ten largest pharmaceutical companies

Source: World Bank team analysis of FINA data downloaded from Poslovna Hrvatska
The emerging pharma strategic segments focus on integrated services rather than stand-alone products. In conventional health care and wellness, products come in stand-alone manufactured packages such as tablets or capsules. Emerging strategic segments incorporate new types of drugs, digital technologies, and bundled services. Manufacturers need to integrate services with products and provide full solutions combining pharmaceuticals with diagnostic and monitoring services to administer them correctly.

Emerging strategic segments require awareness of the whole value chain. Firms need to see themselves as part of an entire services-oriented value chain. They must adjust their products to suit the needs of large integrators at the head of the value chain.

Emerging integrated services strategic segments have two primary markets: the consumer-facing (“wellness”) market and the institutional (“beyond the pill”) market. These two strategic segments have different value chains. In the consumer-facing market, the immediate buyers are retailers that sell directly to end users. In the institutional market, the buyers are large health care organizations. Each strategic segment has unique needs.

“Wellness”

Consumer-facing markets that emphasize psychological well-being as well as physical health

The “wellness” strategic segment will increasingly require:

- **Integration of physical and psychological value.** Consumers are looking for products to make them look and feel great. Such products emphasize psychological, not just physical benefits.

- **Experimentation and advice.** The option to become familiar with a product helps consumers develop a greater willingness to buy it. The education of consumers becomes an integral part of the offering.
“Beyond the Pill”

Targeting healthcare organizations and institutions who are increasingly concerned with outcome-based models including home-based and personalized care.

The “beyond the pill” strategic segment will increasingly require:

- **Procurement based on evidence and outcomes.** Manufacturers must deliver a specific rate of successful patient outcomes. Thus, they need to rigorously collect and present evidence about the efficacy of their products.

- **Home-based care.** Home-based care is cheaper than hospitalization. However, it requires remotely delivering treatments, monitoring patients’ conditions, and sending data to the right medical professionals.

- **Personalized health care.** Many of the largest life sciences multinationals are moving in this direction. However, large companies find it costly to adjust their offer to diverse needs. Croatia could help fill this gap.
MAKING CROATIA COMPETITIVE

Where Is the Value Chain Weak?

Several gaps in the pharma value chain limit Croatia’s competitiveness:

- **Software services.** Smart packaging (such as wireless pill bottles that track the consumption of drugs) can increase adherence to medical directions; but data collection on frequency of use, efficacy, and side effects must complement the packaging. Accompanying software must filter and manage a large quantity of data. Croatia has a healthy software development community, so it now needs to show that it can supply these specific, technically demanding solutions.

- **Delivery system logistics.** Delivering the right prescriptions on time is critical. Any solutions provider must demonstrate this capacity, with sustained reliability.

- **Displaced care via online/telephone support.** The final ingredient of this solution is a remote support service. The support service guides patients in solving problems and supplies minor health advice. Croatia is labor-intensive and multilingual. However, telephone support for health services provision will need a workforce with specific training in healthcare expertise that is not yet available in Croatia.
Areas for Reform

To improve its competitiveness in strategic segments, Croatia will need to address several issues in its pharma industry ecosystem:

**Demand Conditions**

Croatian firms must adapt to meet demand from the European Union (EU). Croatian consumers are adopting the advanced buyer requirements of their EU neighbors, pressuring companies to innovate.

The demand preferences of Croatia’s main public buyers are unclear. Healthcare policy in Croatia promotes generic drugs over branded ones to cut costs. Moreover, Croatia’s public healthcare system has famously long payment delays, with some pharmaceutical companies waiting more than a year to be paid for products delivered, thereby causing financial difficulties for the companies.

**Factor Conditions**

Although Croatia offers low wages compared to its neighbors, labor productivity is also low. Moreover, real wages are increasing faster than productivity. From 2000 to 2014, productivity rose by about 20 percent. Over the same period, real wages increased by over 70 percent.

Vocational education and training could better match industry needs. Croatia has a higher rate of tertiary education graduates in technical fields than many EU countries. However, pharmaceutical companies want more industry-specific focus.

**Related and Supporting Industries**

Pharma firms in Croatia could use local suppliers more. Local suppliers include manufacturers of active pharmaceutical ingredients (especially Pliva), pharmaceutical capsules (for example, ACG Lukaps), and packaging. Other suppliers and related industries are nearby in eastern Austria or Slovenia.

Pharma firms in Croatia are not very innovative. A few multinational companies dominate R&D. The R&D intensity of small firms is in 16th place in the EU and 21st place for medium firms.

Croatia has inadequate support for innovation in pharma. Croatia has a cluster organization for the health industry. It also has specialized bodies to foster growth and development of early-stage biotech companies. They supply laboratory facilities, technology transfer, and business training. Companies, however, are concerned that these bodies do not sufficiently target their needs.

**Government**

Although governments of Croatia since independence have steadily enhanced the business environment, there is still room for improvement. Croatia could advance in the areas of land registry, business registration, resolving insolvency, and construction permits. For pharmaceutical industries, these priority areas impinge on growth:

- Extreme delays in payment by public hospitals. The receivable payment period, which ranges from 280 to 1,000 days, is excessive.

- High prices for mandatory regulatory services. HALMED, the regulatory body for medicinal products and medical devices, grants product registrations and authorization for marketing. HALMED’s soaring prices in recent years have caused companies to withdraw products from the market.
Recommendations

Specific actions could improve Croatia’s competitiveness in strategic segments:

1. Running a pilot to develop remote home-based patient care. The pilot must enable firms to evaluate and improve their solutions. A second testbed pilot would allow stakeholders to establish a platform to engage consumers around over-the-counter (OTC) drugs and supplements. Relevant line ministries or government corporations would run the pilot through a public procurement.

   Estimated timeframe: 3 years.

2. Conducting technology scouting to help firms transition into the newer strategic segments. The Ministry of Economy Entrepreneurship and Crafts (MoEEC) would implement this recommendation as a matching grants scheme.

   Estimated timeframe: 3 years.

3. Aiding producers with attaining international or European Certificates of Suitability (CEP) for pharmacopeia standards. MoEEC would implement this recommendation as a matching grants scheme.

   Estimated timeframe: 6 years.

4. Establishing a business mentoring program dedicated to transitioning academics into entrepreneurs. Currently, many of Croatia’s small pharma firms are managed by their founders who have research backgrounds, not business or management expertise. They need help to cultivate strategic business skills and managerial competencies. MoEEC (through EBRD) or the Croatian Chamber of Economy would implement this recommendation as a matching grants scheme.

   Estimated timeframe: 2 years.

5. Conducting market intelligence studies on technical requirements for remote home-based patient care and drug-device integration in target markets. MoEEC and other relevant agencies would implement this recommendation through procurement of studies from private sector firms, which can then be distributed to the industry.

   Estimated timeframe: 5 years.

6. Providing collective information to maximize chances of success in foreign tenders. Information on common issues faced by prior bidders in EU countries is expensive for individual firms to obtain. However, sharing costs can ease the financial burden and at the same time be mutually beneficial. MoEEC would provide coordination services and guarantees to cover the cost of bidding for foreign tenders.

   Estimated timeframe: 5 years.

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