



COVER STORY

THE RECOVERY

### U.S. and International

By John G. Rodwan, Jr.

After a couple of years that witnessed atypical declines in volume and sales, bottled water rebounded in 2010. Though growth rates were lower than they had been as recently as in the mid-2000s—when the category continued to enjoy muscular growth even after having attained significant scale—they did signal the beginning of a recovery that could augur renewed vibrancy ahead. The recessionary state of the U.S. economy was the primary cause of the decreases registered in 2008 and 2009, and the bottled water market should see strengthening performances as the economic conditions improve.

Situating bottled water in the context of the overall liquid refreshment beverage marketplace tells the tale. That group which includes carbonated soft drinks, sports beverages, fruit beverages, ready-to-drink tea and coffee, and energy drinks as well as bottled water—also declined in volume in both 2008 and 2009, and did so more severely than the packaged water segment. Liquid refreshment beverages as a whole returned to growth in 2010, enlarging by 1.2 percent, but bottled water grew at a considerably faster rate, up by 3.5 percent. Carbonated soft drinks—the sole segment with greater size than bottled water—contracted yet again.

Consequently, the number-two beverage type by volume once again increased its share of total beverage intake and reaffirmed its status as a major part of Americans' hydration habits. In 2000, carbonated soft drinks accounted for nearly 28 percent of total liquid consumption by U.S. consumers, who imbibed more 15 billion gallons of soda, compared with 4.7 billion gallons of bottled water, which represented less than 9 percent of the total and put bottled water as the number-five position behind beer, coffee, and milk in addition to fizzy flavored drinks. In 2010, carbonated soft drink volume slipped to 13.8 billion gallons while bottled water's reached 8.75 billion gallons. As a result, carbonated soft drinks' market share eroded to about 23 percent, while water's approached 15 percent. In terms of liquid refreshment beverages exclusively (i.e., excluding alcohol, milk, hot tea, coffee, etc.), bottled water accounted for nearly 30 percent of total volume in 2010, up six-tenths of a percentage point from the year before.

**Developments and Statistics** 

Before the protracted economic downturn and beverage industry challenges it posed, rapid volume growth characterized bottled water during much of that time frame, as chronicled in the most recent edition of *Bottled Water in the U.S.*, Beverage Marketing Corporation's annually issued analysis of the market. During the 2000s, bottled water volume achieved double-digit percentage growth rates in two years and advanced at rates close to that level in several others. Bottled water volume grew by close to 12 percent in 2002, and after growing by 10.8 percent in 2005, it enlarged by 9.5 percent in 2006. By contrast, carbonated soft drinks followed several years of slow growth with multiple volume reductions. In fact, the category suffered its sixth consecutive year of volume reduction in 2010.

With bottled water, the back-to-back declines look more like a temporary aberration than a paradigm shift. In a notable departure from earlier years, bottled water volume declined by 1.0 percent in 2008 and then by 2.5 percent in 2009. Furthermore, producers' revenues declined in both 2008 and 2009 as well. Bottled water wholesale dollar sales first exceeded \$6 billion in 2000. By 2007, they topped \$11.5 billion. Category sales declined to \$11.2 billion the following year and to less than \$10.6 billion in 2009. By 2010, bottled water had nearly recouped its losses with volume just 7 million gallons shy of the historical high hit in 2007. While wholesale

2001 – 2010					
Year	Millions of Gallons	Annual Percent Change	Millions of Dollars	Annual Percent Change	
2001	5,185.3		\$6,880.6		
2002	5,795.6	11.8 percent	\$7,901.4	14.8 percent	
2003	6,269.8	8.2 percent	\$8,526.4	7.9 percent	
2004	6,806.7	8.6 percent	\$9,169.5	7.5 percent	
2005	7,538.9	10.8 percent	\$10,007.4	9.1 percent	
2006	8,255.0	9.5 percent	\$10,857.8	8.5 percent	
2007	8,757.6	6.1 percent	\$11,551.5	6.4 percent	
2008	8,668.0	-1.0 percent	\$11,178.5	-3.2 percent	
2009	8,453.1	-2.5 percent	\$10,601.3	-5.2 percent	
2010	8,750.6	3.5 percent	\$10,683.8	0.8 percent	
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**U.S. BOTTLED WATER MARKET** 

dollars still have some ways to go before matching the summit attained that year, they did inch upward in 2010.

U.S. consumers have demonstrated a strong thirst for bottled water, and all signs indicate it will persist in the future. Changes in average intake indicate persistent interest in a product that consumers look to as a healthful alternative to other beverages. Americans upped their annual consumption by more than 11 and a half gallons from 16.7 gallons per person in 2000 to 28.3 gallons 10 years later. During the same period, per capita consumption of carbonated soft drinks dropped by eight and a half gallons. Per capita consumption of other major beverage categories, like milk and fruit beverages, also declined. Other types, including coffee and tea, were characterized by stability, though the ready-todrink versions of both categories made gains. Indeed, those beverages associated with beneficial properties and functional benefits—a subset that includes packaged water as well as energy drinks, sports beverages, and readyto-drink tea-were the most resilient elements of the beverage market in 2010. Thus, bottled water proved itself to be not only a key component of the liquid refreshment beverage market but also well positioned for future increases in per capita consumption.

Numerous factors contribute to U.S. consumers' enthusiasm for bottled water, including health, safety, convenience, and value. Bottled water's versatility makes it suitable for consumption at any time of day and in virtually any situation. It doesn't need to be kept cold (like soft drinks or juice) or warm (like conventional coffee or tea). As far as ready-to-drink commercial beverages go, it's relatively inexpensive, and with competitive (sometimes aggressive) pricing, it is becoming increasingly affordable for consumers. Various packaging types, ranging from home and office delivery (HOD) to single-serve, facilitate a variety of uses.

Consumers' interest in foods and beverages that confer benefits above and beyond refreshment also contributes to the quintessential hydrating beverage's performance in recent years. Amid concern about obesity and other health matters, bottled water's lack of calories and artificial ingredients attracts conscientious consumers. Even where tap water may be safely potable, many people prefer bottled water, which they regard as superior in taste. The convenient availability of packaged water wherever beverages are sold also crucially differentiates bottled water from tap.

Moreover, the hindrances to beverage market growth in 2008 and 2009 appear to have abated. Energy, commodity, and other input costs contributed to higher prices for consumers. That drove them to seek savings by opting for smaller, more affordable unit sizes, eschewing pricier imports, or occasionally foregoing packaged beverages altogether, which largely explains what happened in 2008 and 2009. But that storm has passed.

Although bottled water has often been likened to tap water, bottled water actually achieved its market position

#### **U.S. BOTTLED WATER MARKET**

Per Capita Consumption 2000 – 2010

Year	Gallons Per Capita	Annual Percent Change		
2000	16.7			
2001	18.2	8.6 percent		
2002	20.1	10.6 percent		
2003	21.6	7.2 percent		
2004	23.2	7.5 percent		
2005	25.4	9.7 percent		
2006	27.6	8.4 percent		
2007	29.0	5.3 percent		
2008	28.5	-1.8 percent		
2009	27.6	-3.2 percent		
2010	28.3	2.6 percent		
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by luring consumers away from other packaged beverages perceived as less wholesome than bottled water. While some consumers may have turned away from regular, fullcalorie sodas in favor of their diet versions, many others moved over to bottled water instead.

#### **Category Developments**

As usual, domestic non-sparkling water remained the most sizeable segment of the U.S. packaged water industry. Domestic non-sparkling water's 8.4 billion gallons represented 96.2 percent of total volume in 2010. As a whole, domestic non-sparkling saw modest growth in both 2008 and 2009 and outperformed the overall bottled water market again in 2010.

The non-sparkling category includes various components that had very dissimilar results. In 2010, two segments grew and two of them declined. Throughout most of the 1990s and 2000s, the retail premium segment-consisting of still water in single-serve polyethylene terephthalate (PET) bottles—drove the overall category's development. Indeed, the PET component enlarged by a double-digit percentage rate 16 consecutive times through 2007. Growth slowed markedly in 2008 before it disappeared in 2009. Yet PET's 0.7 percent reduction was far less than the 2.5 percent loss measured for bottled water in general. Besides, PET volume in 2009 of almost 5.2 billion gallons stood more than 4.1 billion gallons higher than it had in 1999, and its share of total bottled water swelled from 24 percent to more than 61 percent during that 10-year period. In 2010, PET experienced the strongest growth of

### In 2010, bottled water wholesale dollars inched upward.

any bottled water segment, advancing by 6.7 percent to 5.5 billion gallon, which boosted its share above 63 percent.

Retail bulk volume growth slowed as more and more consumers selected convenient PET multipacks in large format retail channels instead of larger (1 to 2.5 gallon) sizes. Its share eroded from nearly one-quarter of the category volume at the beginning of the century to slightly more than 11 percent by 2010, largely as a result of competition from PET. Direct delivery also confronted intramural competition from handy, portable PET bottles. The segment, which comprised the largest of them all as recently as the mid-1990s, accounted for 13.2 percent of total volume by 2010. U.S. HOD volume slipped from close to 1.4 billion gallons in the early 2000s to less than 1.2 billion gallons by the decade's end.

The relatively small, essentially regional vending segment involving refillable jug containers achieved growth late in the decade after several years of contraction. Its low cost during economic hard times undoubtedly explains vending's results. It continued to grow in 2010 albeit at a far slower rate than recorded the year before, when all other pieces of the domestic non-sparkling segment struggled.

<b>U.S. BOTTLED WATER MARKET</b> Volume and Growth by Segment 2001 – 2010								
	Non-Sj	parkling	Domestic	mestic Sparkling Imports		Total		
Year	Volume*	Change	Volume*	Change	Volume*	Change	Volume*	Change
2001	4,917.3		144.0		123.9		5,185.3	
2002	5,487.5	11.6 percent	149.5	3.8 percent	158.7	28.0 percent	5,795.6	11.8 percent
2003	5,923.9	8.0 percent	152.6	2.1 percent	193.3	21.8 percent	6,269.8	8.2 percent
2004	6,411.3	8.2 percent	166.8	9.3 percent	228.6	18.2 percent	6,806.7	8.6 percent
2005	7,171.4	11.9 percent	185.0	10.9 percent	182.5	-20.2 percent	7,538.9	10.8 percent
2006	7,901.4	10.2 percent	189.3	2.3 percent	164.3	-10.0 percent	8,255.0	9.5 percent
2007	8,376.6	6.0 percent	200.1	5.7 percent	180.9	10.1 percent	8,757.6	6.1 percent
2008	8,305.3	-0.9 percent	200.8	0.4 percent	161.8	-10.6 percent	8,668.0	-1.0 percent
2009	8,117.6	-2.3 percent	204.1	1.6 percent	131.5	-18.7 percent	8,453.1	-2.5 percent
2010	8,418.2	3.7 percent	213.5	4.6 percent	118.9	-9.6 percent	8,750.6	3.5 percent
* Millions of Gallon	s.							

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### Consumers sought savings in 2008 and 2009, but that storm has passed.

Of the two segments outside the domestic non-sparkling category, one accelerated in 2010 while the other continued to stagnate. The imported water segment, the smallest of them all, is prone to fluctuations. In the 2000s, it registered double-digit percentage growth in some years, and equally sizeable contractions in others. After one of the up years in 2007, imported water's volume fell sharply in 2008 and then plummeted precipitously in 2009. It continued to shrink in 2010. Sparkling water held a small share of bottled water volume but grew at a rate second only to retail premium PET in 2010.

As usual, domestic non-sparkling water accounted for almost all per capita bottled water consumption in 2010. Sparkling water and imports each represented less than one gallon per person. (With imports, the figure actually worked out to less than half a gallon per U.S. resident.) In the key PET portion, average intake moved from less than 5 gallons in 2000 to almost 18 gallons 10 years later.

#### **International Developments**

Bottled water became a beverage industry phenomenon not only in the United States—easily the top market in terms of volume—but also in virtually every major geographical region of the world. Bottled water first became a large, mainstream commercial beverage category in Western Europe, where consumption of it has long been part of many residents' daily routine. It is now a truly global beverage, found even in some of the more remote corners of the globe. Several Asian markets achieved strong growth to become major bottled water markets during the 2000s.

Global bottled water consumption is estimated to have exceeded 56 billion gallons in 2010, according to data from the most recent edition of Beverage Marketing's *The Global Bottled Water Market*. Total consumption swelled by 5.1 percent in 2010. Per capita consumption of 8.2 gallons represented a gain of 1.4 gallons over the course of five years.



Of course, per capita consumption by individual region or country can diverge dramatically from the global average. For instance, several Western European countries have per capita consumption levels far above 25 gallons, and the number-one market exceeded 60 gallons per person in 2010. At the same time, however, much of the developing world, where the bulk of the world's population resides, finds its per capita consumption figures still in the singledigit range.

Even though the global per capita consumption figure may obscure pronounced regional differences, bottled water's global growth indicates demand for it in diverse markets. Consumers have demonstrated a thirst for it in highly developed markets, in less developed ones, and in economies in transition. Bottled water tapped into some divergent consumer trends around the globe. In developed countries such as the United States and Canada, bottled water has become an especially dynamic major commercial beverage category by registering as an attractive option for health-conscious consumers. Marketers positioned bottled water as a beneficent alternative to carbonated soft drinks and juice drinks. Many in the developed world see bottled water as not only a way of achieving hydration but also as a functional beverage. At the same time, bottled water serves at least as a partial solution to the problem of often-unsafe water found in many economically developing countries.

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Much of the world's bottled water market is still highly fragmented and controlled by local brands, but consolidation is rapidly occurring, as four companies have come to dominate much of the market. Swiss food and beverage giant Nestlé and France's Danone are the traditional leaders of the bottled water pack. Both companies initially centered their operations around the core markets of Western Europe and the United States. However, as water growth is increasingly coming from the developing world, Nestlé and Danone have expanded their initiatives to the competitive fields of Asia, Latin America, and other areas. In fact, Danone stepped back from the U.S. market to focus on some of those other markets. Soft drink industry leaders Coca-Cola and PepsiCo also joined the bottled water race. Following their strong showings in

<b>GLOBAL BOTTLED WATER MARKET</b> Leading Countries' Consumption and Compound Annual Growth Rates 2005 – 2010				
2010 Rank	Countries	es Millions of Gallons		CAGR*
		2005	2010	2005/10
1	United States	7,538.9	8,750.6	3.0 percent
2	Mexico	4,966.5	7,236.2	7.8 percent
3	China	3,658.8	6,409.5	11.9 percent
4	Brazil	3,226.4	4,378.7	6.3 percent
5	Indonesia	2,009.9	3,312.5	10.5 percent
6	Germany	2,786.4	2,913.6	0.9 percent
7	Italy	2,934.9	2,863.3	-0.5 percent
8	France	2,218.4	2,241.6	0.2 percent
9	Thailand	1,317.7	2,008.3	8.8 percent
10	Spain	1,559.6	1,329.3	-3.1 percent
	Top 10 Subtotal	32,217.5	41,433.9	5.2 percent
	All Others	11,681.3	14,845.7	4.9 percent
	WORLD TOTAL	43,898.8	56,289.4	5.1 percent

\* Compound Annual Growth Rate

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# Plastic packaging is preferred over glass in almost every country, except Germany.

the United States, both companies increasingly devoted resources and energy to developing their global bottled water businesses.

While Europe has long ranked as the leading regional consumer of bottled water (even though the largest national markets did not lie within the continent's borders), both North America and Asia recently surpassed Europe in bottled water volume. North America boasts the two largest individual bottled water markets, the United States and Mexico, which together accounted for more than 28 percent of the world's packaged water market in 2010.

Although the U.S. bottled water market had been a catalyst for much of the global expansion up until the mid-2000s, its compound annual growth rate (CAGR) of 3.0 percent for the five-year period ending with 2010 was noticeably slower then the 5.1 percent CAGR achieved by the growth of the global market during the same period. Mexico alone accounted for 12.9 percent of the global volume with 7.2 billion gallons in 2010 and a market-beating CAGR of 7.8 percent. China ranked as the third country that could claim a double-digit share of global volume with 6.4 billion gallons, or 11.4 percent of the total. Chinese bottled water volume enjoyed doubledigit percentage growth rates for several consecutive years, registering an 11.9 percent CAGR for the period from 2005 to 2010-by far the highest rate among the 10 biggest bottled water markets. Fourth place Brazil and fifth place Indonesia also registered CAGRs higher than the international market's—much higher in the case of the number-two Asian market.

Europe may not boast the biggest bottled water markets, but it does have several major ones, including four of the 10 biggest. However, as those are firmly established, their growth tends to be slower than those where packaged water has a less entrenched tradition. Indeed, some of the most prominent countries experienced contraction or only very slight growth. For instance, in 2010, Italy's volume declined by 0.5 percent and Spain's dropped by 3.1 percent. During the five-year period ending that year, Germany, the sixth largest bottled water market in the world, had a CAGR of just 0.9 percent, and eighth place France moved even more slowly. Italy, the world's number-seven market, declined, as did Spain, the fourth largest European market and the tenth biggest globally. As a group, the four leading European bottled water markets accounted for slightly less than 17 percent of the world's total volume in 2010.

In the majority of countries throughout the globe, still water accounts for the majority of sales. Sparkling water sales are strong in a minority of countries—such as Argentina, Chile, Uruguay, the Netherlands, and Germany—where sparkling water is often tied to mealconsumption practices. On a global level, sparkling water accounts for an estimated 10 percent of the total volume, with still water accounting for the remaining 90 percent.

Plastic packaging is preferred over glass in almost every country, with the exception of Germany, where recycling laws make a determinative impact on packaging trends. However, even in Germany, and in other countries (such as the United Kingdom), where glass has a strong presence, PET is the most dynamic and rapidly growing segment. At about one-third of global volume, HOD still accounts for a minority of global bottled water sales. Yet, it is a vital segment in many countries, such as Mexico, where it accounts for more than two-thirds of the volume.

Mexico leads the world in bottled water consumption. Average intake in Mexico jumped from 47.3 gallons in 2005 to 64.3 gallons five years later. The former leader in average intake, Italy, consumed the equivalent of 49.3 gallons per person in 2010.

Several Middle Eastern markets rank very highly in per capita bottled water consumption. With the equivalent of more than 40 gallons for each resident in 2010, the United Arab Emirates (UAE) had the third-highest level of bottled water consumption in the world. In addition to the UAE, the Middle East region has Lebanon, Qatar, and Saudi Arabia in the top 20 in per capita bottled water consumption. At 20.5 gallons per resident, Israel also consumes bottled water at a rate greater than the global average.

While Europe may no longer hold the top spot in volume per capita, 12 of the top 20 bottled water consumers on a per person basis are European countries. The consumers of the combined market of Belgium-Luxembourg imbibed more than 39 gallons each. France, Germany, Spain, and Italy were the other European countries with per capita consumption greater than 30 gallons. French consumers quaffed 1.6 gallons less bottled water in 2010 than they had five years earlier. In 2010, Germany and Spain had per capita consumption rates of 35.4 and 32.8 gallons, respectively, putting them in fifth and seventh place in terms of average bottled water intake. Unlike France and Spain, Germany consumed more bottled water per person in 2010 than it had five years before. Hungary, which ranked tenth, increased its bottled water consumption greatly during the 2000s. While markets in the west hold the highest numbers, Eastern Europe can claim several spots among top-20 in per capita bottled water consumption, although Bulgaria fell off the bottom of the list in 2009, when China's special administrative region of Hong Kong displaced it. Austria held the number-20 spot in 2010.

While Asian nations attained prominence among the world's bottled water markets when measured in total volume, the most populous countries generally do not have high per-person intake levels. Thailand stood among the

#### **GLOBAL BOTTLED WATER MARKET**

Per Capita Consumption by Leading Countries 2005 – 2010

2000 2010					
2010		Gallons Per Capita			
Rank	Countries	2005	2010		
1	Mexico	47.3	64.3		
2	Italy	50.5	49.3		
3	United Arab Emirates	30.2	40.5		
4	Belgium-Luxembourg	42.4	39.2		
5	Germany	33.8	35.4		
6	France	36.6	35.0		
7	Spain	38.7	32.8		
8	Lebanon	28.2	32.0		
9	Thailand	20.2	30.2		
10	Hungary	18.4	29.3		
11	Switzerland	27.4	28.5		
12	United States	25.4	28.3		
13	Slovenia	21.5	28.3		
14	Croatia	20.5	26.7		
15	Cyprus	26.0	25.8		
16	Qatar	21.3	25.1		
17	Saudi Arabia	24.6	25.0		
18	China, Hong Kong SAR	18.3	25.0		
19	Czech Republic	23.8	24.3		
20	Austria	21.5	24.0		
	GLOBAL AVERAGE	6.8	8.2		
Source: Beverage Marketing Corporation Copyright © 2011 by Beverage Marketing Corporation					

# Bottled water is poised to achieve still another high in per capita consumption in the years ahead.

top 20 in terms of per capita bottled water consumption with 30.2 gallons in 2010. Hong Kong made the list for the first time as its average intake approached 22 gallons in 2009 and continued to increase per capita consumption in 2010, when it hit 25 gallons, essentially matching Saudi Arabia's figure. Despite its status as the third-largest market, mainland China had a per capita consumption figure of just 4.8 gallons, well below the global norm. However, Chinese consumption grew by more than two gallons from 2005 to 2010.

Americans' per capita bottled water consumption puts the United States in the number-12 position among the countries of the world, between Switzerland and Slovenia.

#### **Looking Ahead**

Beverage Marketing fully anticipates bottled water to continue recovering from the weakness felt at the end of the 2000s and again invigorate the U.S. multiple beverage marketplace in the second decade of the 21st century. The total amount of liquid Americans annually consume will remain stable, resulting in overall volume growth in line with population increase, but bottled water is on track to grow considerably faster. As has become the norm, carbonated soft drinks will continue to contract. Most other major beverage categories—including coffee, milk, and tea—are likely to grow much more slowly than bottled water, which is poised to achieve still another high in per capita consumption in the years ahead. **BWR** 

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